



8

SEQUENCE LISTING

<110> Ruvkun, Gary
Ogg, Scott

<120> THERAPEUTIC AND DIAGNOSTIC TOOLS FOR
IMPAIRED GLUCOSE TOLERANCE CONDITIONS

<130> 00786/351004

<140> 09/205,658

<141> 1998-12-03

<150> 08/857,076

<151> 1997-05-15

<150> 08/888,534

<151> 1997-07-07

<150> US98/10080

<151> 1998-05-15

<160> 328

<170> FastSEQ for Windows Version 4.0

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Gly Gly Pro Tyr Cys	Leu Thr Asn Arg Gly	Gly Ser Asn Glu Arg Gly
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Ala Gly Phe Gly Glu	Ala Val Arg Leu Thr	Asp Gly Val Gly Ser Gly
1570	1575	1580
His Leu Asn Asp Asp	Asp Tyr Val Glu Lys	Glu Ile Ser Ser Met Asp
1585	1590	1595
Thr Arg Arg Ser Thr	Gly Ala Ser Ser Ser	Ser Tyr Gly Val Pro Gln
1605	1610	1615
Thr Asn Trp Ser Gly	Asn Arg Gly Ala Thr	Tyr Tyr Thr Ser Lys Ala
1620	1625	1630
Gln Gln Ala Ala Thr	Ala Ala Ala Ala Ala	Ala Ala Leu Gln Gln
1635	1640	1645
Gln Gln Asn Gly Gly	Arg Gly Asp Arg Leu	Thr Gln Leu Pro Gly Thr
1650	1655	1660
Gly His Leu Gln Ser	Thr Arg Gly Gly Gln	Asp Gly Asp Tyr Ile Glu
1665	1670	1675
Thr Glu Pro Lys Asn	Tyr Arg Asn Asn Gly	Ser Pro Ser Arg Asn Gly
1685	1690	1695
Asn Ser Arg Asp Ile	Phe Asn Gly Arg Ser	Ala Phe Gly Glu Asn Glu
1700	1705	1710
His Leu Ile Glu Asp	Asn Glu His His Pro	Leu Val
1715	1720	

<210> 13
 <211> 139
 <212> PRT
 <213> Caenorhabditis elegans

<400> 13
 Thr Ser Gly Ser Gly Met Gly Pro Thr Thr Leu His Lys Leu Thr Ile
 1 5 10 15
 Gly Gly Gln Ile Arg Leu Thr Gly Arg Val Gly Ser Gly Arg Phe Gly
 20 25 30
 Asn Val Ser Arg Gly Asp Tyr Arg Gly Glu Ala Val Ala Val Lys Val
 35 40 45
 Phe Asn Ala Leu Asp Glu Pro Ala Phe His Lys Glu Thr Glu Ile Phe
 50 55 60
 Glu Thr Arg Met Leu Arg His Pro Asn Val Leu Arg Tyr Ile Gly Ser
 65 70 75 80
 Asp Arg Val Asp Thr Gly Phe Val Thr Glu Leu Trp Leu Val Thr Glu
 85 90 95
 Tyr His Pro Ser Gly Ser Leu His Asp Phe Leu Leu Glu Asn Thr Val
 100 105 110
 Asn Ile Glu Thr Tyr Tyr Asn Leu Met Arg Ser Thr Ala Ser Gly Leu
 115 120 125
 Ala Phe Leu His Asn Gln Ile Gly Gly Ser Lys
 130 135

<210> 14
 <211> 62
 <212> PRT
 <213> Caenorhabditis elegans

<400> 14
 Glu Asp Ala Ala Ser Asp Ile Ile Ala Asn Glu Asn Tyr Lys Cys Gly
 1 5 10 15
 Thr Val Arg Tyr Leu Ala Pro Glu Ile Leu Asn Ser Thr Met Gln Phe
 20 25 30
 Thr Val Phe Glu Ser Tyr Gln Cys Ala Asp Val Tyr Ser Phe Ser Leu
 35 40 45
 Val Met Trp Glu Thr Leu Cys Arg Cys Glu Asp Gly Asp Val
 50 55 60

<210> 15
 <211> 31
 <212> PRT
 <213> Caenorhabditis elegans

<400> 15
 Lys Pro Ala Met Ala His Arg Asp Ile Lys Ser Lys Asn Ile Met Val
 1 5 10 15
 Lys Asn Asp Leu Thr Cys Ala Ile Gly Asp Leu Gly Leu Ser Leu
 20 25 30

<210> 16
 <211> 72
 <212> PRT
 <213> Caenorhabditis elegans

<400> 16
 Ile Pro Tyr Ile Glu Trp Thr Asp Arg Asp Pro Gln Asp Ala Gln Met
 1 5 10 15
 Phe Asp Val Val Cys Thr Arg Arg Leu Arg Pro Thr Glu Asn Pro Leu
 20 25 30
 Trp Lys Asp His Pro Glu Met Lys His Ile Met Glu Ile Ile Lys Thr
 35 40 45
 Cys Trp Asn Gly Asn Pro Ser Ala Arg Phe Thr Ser Tyr Ile Cys Arg
 50 55 60
 Lys Arg Met Asp Glu Arg Gln Gln
 65 70

<210> 17
 <211> 150
 <212> PRT
 <213> Caenorhabditis elegans

<400> 17
 Tyr Phe Glu Ser Val Asp Arg Phe Leu Tyr Ser Cys Val Gly Tyr Ser
 1 5 10 15
 Val Ala Thr Tyr Ile Met Gly Ile Lys Asp Arg His Ser Asp Asn Leu
 20 25 30
 Met Leu Thr Glu Asp Gly Lys Tyr Val His Ile Asp Phe Gly His Ile
 35 40 45
 Leu Gly His Gly Lys Thr Lys Leu Gly Ile Gln Arg Asp Arg Gln Pro
 50 55 60
 Phe Ile Leu Thr Glu His Phe Met Thr Val Ile Arg Ser Gly Lys Ser
 65 70 75 80
 Val Asp Gly Asn Ser His Glu Leu Gln Lys Phe Lys Thr Leu Cys Val
 85 90 95
 Glu Ala Tyr Glu Val Met Trp Asn Asn Arg Asp Leu Phe Val Ser Leu
 100 105 110
 Phe Thr Leu Met Leu Gly Met Glu Leu Pro Glu Leu Ser Thr Lys Ala
 115 120 125
 Asp Leu Asp His Leu Lys Lys Thr Leu Phe Cys Asn Gly Glu Ser Lys
 130 135 140
 Glu Glu Ala Arg Lys Phe
 145 150

<210> 18
 <211> 113
 <212> PRT
 <213> Caenorhabditis elegans

<400> 18
 Ser Pro Leu Asp Pro Val Tyr Lys Leu Gly Glu Met Ile Ile Asp Lys
 1 5 10 15
 Ala Ile Val Leu Gly Ser Ala Lys Arg Pro Leu Met Leu His Trp Lys
 20 25 30
 Asn Lys Asn Pro Lys Ser Asp Leu His Leu Pro Phe Cys Ala Met Ile
 35 40 45
 Phe Lys Asn Gly Asp Asp Leu Arg Gln Asp Met Leu Val Leu Gln Val
 50 55 60
 Leu Glu Val Met Asp Asn Ile Trp Lys Ala Ala Asn Ile Asp Cys Cys
 65 70 75 80
 Leu Asn Pro Tyr Ala Val Leu Pro Met Gly Glu Met Ile Gly Ile Ile
 85 90 95

Glu Val Val Pro Asn Cys Lys Thr Ile Phe Glu Ile Gln Val Gly Thr
100 105 110
Gly

<210> 19
<211> 106
<212> PRT
<213> Caenorhabditis elegans

<400> 19
Leu Ala Phe Val Trp Thr Asp Arg Glu Asn Phe Ser Glu Leu Tyr Val
1 5 10 15
Met Leu Glu Lys Trp Lys Pro Pro Ser Val Ala Ala Ala Leu Thr Leu
20 25 30
Leu Gly Lys Arg Cys Thr Asp Arg Val Ile Arg Lys Phe Ala Val Glu
35 40 45
Lys Leu Asn Glu Gln Leu Ser Pro Val Thr Phe His Leu Phe Ile Leu
50 55 60
Pro Leu Ile Gln Ala Leu Lys Tyr Glu Pro Arg Ala Gln Ser Glu Val
65 70 75 80
Gly Met Met Leu Leu Thr Arg Ala Leu Cys Asp Tyr Arg Ile Gly His
85 90 95
Arg Leu Phe Trp Leu Leu Arg Ala Glu Ile
100 105

<210> 20
<211> 139
<212> PRT
<213> Caenorhabditis elegans

<400> 20
Glu Tyr Trp Ile Val Thr Glu Phe His Glu Arg Leu Ser Leu Tyr Glu
1 5 10 15
Leu Leu Lys Asn Asn Val Ile Ser Ile Thr Ser Ala Asn Arg Ile Ile
20 25 30
Met Ser Met Ile Asp Gly Leu Gln Phe Leu His Asp Asp Arg Pro Tyr
35 40 45
Phe Phe Gly His Pro Lys Lys Pro Ile Ile His Arg Asp Ile Lys Ser
50 55 60
Lys Asn Ile Leu Val Lys Ser Asp Met Thr Thr Cys Ile Ala Asp Phe
65 70 75 80
Gly Leu Ala Arg Ile Tyr Ser Tyr Asp Ile Glu Gln Ser Asp Leu Leu
85 90 95
Gly Gln Val Gly Thr Lys Arg Tyr Met Ser Pro Glu Met Leu Glu Gly
100 105 110
Ala Thr Glu Phe Thr Pro Thr Ala Phe Lys Ala Met Asp Val Tyr Ser
115 120 125
Met Gly Leu Val Met Trp Glu Val Ile Ser Arg
130 135

<210> 21
<211> 61
<212> PRT
<213> Caenorhabditis elegans

<400> 21
 Ile Gly Phe Asp Pro Thr Ile Gly Arg Met Arg Asn Tyr Val Val Ser
 1 5 10 15
 Lys Lys Glu Arg Pro Gln Trp Arg Asp Glu Ile Ile Lys His Glu Tyr
 20 25 30
 Met Ser Leu Leu Lys Lys Val Thr Glu Glu Met Trp Asp Pro Glu Ala
 35 40 45
 Cys Ala Arg Ile Thr Ala Gly Cys Ala Phe Ala Arg Val
 50 55 60

<210> 22
 <211> 20
 <212> PRT
 <213> Caenorhabditis elegans

<400> 22
 Pro Ile Thr Asp Phe Gln Leu Ile Ser Lys Gly Arg Phe Gly Lys Val
 1 5 10 15
 Phe Lys Ala Gln
 20

<210> 23
 <211> 163
 <212> PRT
 <213> Caenorhabditis elegans

<400> 23
 Thr Asp Ser Glu Thr Arg Ser Arg Phe Ser Leu Gly Trp Tyr Asn Asn
 1 5 10 15
 Pro Asn Arg Ser Pro Gln Thr Ala Glu Val Arg Gly Leu Ile Gly Lys
 20 25 30
 Gly Val Arg Phe Tyr Leu Leu Ala Gly Glu Val Tyr Val Glu Asn Leu
 35 40 45
 Cys Asn Ile Pro Val Phe Val Gln Ser Ile Gly Ala Asn Met Lys Asn
 50 55 60
 Gly Phe Gln Leu Asn Thr Val Ser Lys Leu Pro Pro Thr Gly Thr Met
 65 70 75 80
 Lys Val Phe Asp Met Arg Leu Phe Ser Lys Gln Leu Arg Thr Ala Ala
 85 90 95
 Glu Lys Thr Tyr Gln Asp Val Tyr Cys Leu Ser Arg Met Cys Thr Val
 100 105 110
 Arg Val Ser Phe Cys Lys Gly Trp Gly Glu His Tyr Arg Arg Ser Thr
 115 120 125
 Val Leu Arg Ser Pro Val Trp Phe Gln Ala His Leu Asn Asn Pro Met
 130 135 140
 His Trp Val Asp Ser Val Leu Thr Cys Met Gly Ala Pro Pro Arg Ile
 145 150 155 160
 Cys Ser Ser

<210> 24
 <211> 44
 <212> PRT
 <213> Caenorhabditis elegans

<400> 24

Arg Ala Phe Arg Phe Pro Val Ile Arg Tyr Glu Ser Gln Val Lys Ser
 1 5 10 15
 Ile Leu Thr Cys Arg His Ala Phe Asn Ser His Ser Arg Asn Val Cys
 20 25 30
 Leu Asn Pro Tyr His Tyr Arg Trp Val Glu Leu Pro
 35 40

<210> 25
 <211> 38
 <212> PRT
 <213> Caenorhabditis elegans

<400> 25
 Val Glu Tyr Glu Glu Ser Pro Ser Trp Leu Lys Leu Ile Tyr Tyr Glu
 1 5 10 15
 Glu Gly Thr Met Ile Gly Glu Lys Ala Asp Val Glu Gly His His Cys
 20 25 30
 Leu Ile Asp Gly Phe Thr
 35

<210> 26
 <211> 60
 <212> PRT
 <213> Caenorhabditis elegans

<400> 26
 Asn Leu Ala Glu Thr Gly His Ser Lys Ile Met Arg Ala Ala His Lys
 1 5 10 15
 Val Ser Asn Pro Glu Ile Gly Tyr Cys Cys His Pro Thr Glu Tyr Asp
 20 25 30
 Tyr Ile Lys Leu Ile Tyr Val Asn Arg Asp Gly Arg Val Ser Ile Ala
 35 40 45
 Asn Val Asn Gly Met Ile Ala Lys Lys Cys Gly Cys
 50 55 60

<210> 27
 <211> 20
 <212> PRT
 <213> Caenorhabditis elegans

<400> 27
 Asp Trp Ile Val Ala Pro Pro Arg Tyr Asn Ala Tyr Met Cys Arg Gly
 1 5 10 15
 Asp Cys His Tyr
 20

<210> 28
 <211> 43
 <212> PRT
 <213> Caenorhabditis elegans

<400> 28
 Val Cys Asn Ala Glu Ala Gln Ser Lys Gly Cys Cys Leu Tyr Asp Leu
 1 5 10 15
 Glu Ile Glu Phe Glu Lys Ile Gly Trp Asp Trp Ile Val Ala Pro Pro

20 25 30
 Arg Tyr Asn Ala Tyr Met Cys Arg Gly Asp Cys
 35 40

<210> 29
 <211> 70
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 29
 Asp Cys His Tyr Asn Ala His His Phe Asn Leu Ala Glu Thr Gly His
 1 5 10 15
 Ser Lys Ile Met Arg Ala Ala His Lys Val Ser Asn Pro Glu Ile Gly
 20 25 30
 Tyr Cys Cys His Pro Thr Glu Tyr Asp Tyr Ile Lys Leu Ile Tyr Val
 35 40 45
 Asn Arg Asp Gly Arg Val Ser Ile Ala Asn Val Asn Gly Met Ile Ala
 50 55 60
 Lys Lys Cys Gly Cys Ser
 65 70

<210> 30
 <211> 35
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 30
 Cys Cys Leu Tyr Asp Leu Glu Ile Glu Phe Glu Lys Ile Gly Trp Asp
 1 5 10 15
 Trp Ile Val Ala Pro Pro Arg Tyr Asn Ala Tyr Met Cys Arg Gly Asp
 20 25 30
 Cys His Tyr
 35

<210> 31
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Degenerate probe

<221> misc_feature
 <222> (1)...(23)
 <223> n = A,T,C or G

<400> 31
 ggntgggayt rnrtnrtngc ncc

23

<210> 32
 <211> 18
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Degenerate probe

<221> misc_feature
 <222> (1)...(18)
 <223> n = A,T,C or G

<400> 32
 tgytgynnnnc cnaengar

18

<210> 33
 <211> 127
 <212> PRT
 <213> Caenorhabditis elegans

<400> 33
 Lys Phe His Glu Trp Ala Ala Gln Ile Cys Asp Gly Met Ala Tyr Leu
 1 5 10 15
 Glu Ser Leu Lys Phe Cys His Arg Asp Leu Ala Ala Arg Asn Cys Met
 20 25 30
 Ile Asn Arg Asp Glu Thr Val Lys Ile Gly Asp Phe Gly Met Ala Arg
 35 40 45
 Asp Leu Phe Tyr His Asp Tyr Tyr Lys Pro Ser Gly Lys Arg Met Met
 50 55 60
 Pro Val Arg Trp Met Ser Pro Glu Ser Leu Lys Asp Gly Lys Phe Asp
 65 70 75 80
 Ser Lys Ser Asp Val Trp Ser Phe Gly Val Val Leu Tyr Glu Met Val
 85 90 95
 Thr Leu Gly Ala Gln Pro Tyr Ile Gly Leu Ser Asn Asp Glu Val Leu
 100 105 110
 Asn Tyr Ile Gly Met Ala Arg Lys Val Ile Lys Lys Pro Glu Cys
 115 120 125

<210> 34
 <211> 131
 <212> PRT
 <213> Caenorhabditis elegans

<400> 34
 Asn Thr Thr Cys Gln Lys Ser Cys Ala Tyr Asp Arg Leu Leu Pro Thr
 1 5 10 15
 Lys Glu Ile Gly Pro Gly Cys Asp Ala Asn Gly Asp Arg Cys His Asp
 20 25 30
 Gln Cys Val Gly Gly Cys Glu Arg Val Asn Asp Ala Thr Ala Cys His
 35 40 45
 Ala Cys Lys Asn Val Tyr His Lys Gly Lys Cys Ile Glu Lys Cys Asp
 50 55 60
 Ala His Leu Tyr Leu Leu Gln Arg Arg Cys Val Thr Arg Glu Gln
 65 70 75 80
 Cys Leu Gln Leu Asn Pro Val Leu Ser Asn Lys Thr Val Pro Ile Lys
 85 90 95
 Ala Thr Ala Gly Leu Cys Ser Asp Lys Cys Pro Asp Gly Tyr Gln Ile
 100 105 110
 Asn Pro Asp Asp His Arg Glu Cys Arg Lys Cys Val Gly Lys Cys Glu
 115 120 125
 Ile Val Cys
 130

<210> 35
 <211> 103

<212> PRT
 <213> Caenorhabditis elegans

<400> 35
 Phe Asp Gln Lys Ala Cys Glu Ser Leu Val Lys Lys Leu Lys Asp Lys
 1 5 10 15
 Lys Asn Asp Leu Gln Asn Leu Ile Asp Val Val Leu Ser Lys Gly Thr
 20 25 30
 Lys Tyr Thr Gly Cys Ile Thr Ile Pro Arg Thr Leu Asp Gly Arg Leu
 35 40 45
 Gln Val His Gly Arg Lys Gly Phe Pro His Val Val Tyr Gly Lys Leu
 50 55 60
 Trp Arg Phe Asn Glu Met Thr Lys Asn Glu Thr Arg His Val Asp His
 65 70 75 80
 Cys Lys His Ala Phe Glu Met Lys Ser Asp Met Val Cys Val Asn Pro
 85 90 95
 Tyr His Tyr Glu Ile Val Ile
 100

<210> 36
 <211> 79
 <212> PRT
 <213> Caenorhabditis elegans

<400> 36
 Asn Arg Tyr Ser Leu Gly Leu Glu Pro Asn Pro Ile Arg Glu Pro Val
 1 5 10 15
 Ala Phe Lys Val Arg Lys Ala Ile Val Asp Gly Ile Arg Phe Ser Tyr
 20 25 30
 Lys Lys Asp Gly Ser Val Trp Leu Gln Asn Arg Met Lys Tyr Pro Val
 35 40 45
 Phe Val Thr Ser Gly Tyr Leu Asp Glu Gln Ser Gly Gly Leu Lys Lys
 50 55 60
 Asp Lys Val His Lys Val Tyr Gly Cys Ala Ser Ile Lys Thr Phe
 65 70 75

<210> 37
 <211> 106
 <212> PRT
 <213> Caenorhabditis elegans

<400> 37
 Lys Lys Thr Thr Thr Arg Arg Asn Ala Trp Gly Asn Met Ser Tyr Ala
 1 5 10 15
 Glu Leu Ile Thr Thr Ala Ile Met Ala Ser Pro Glu Lys Arg Leu Thr
 20 25 30
 Leu Ala Gln Val Tyr Glu Trp Met Val Gln Asn Val Pro Tyr Phe Arg
 35 40 45
 Asp Lys Gly Asp Ser Asn Ser Ser Ala Gly Trp Lys Asn Ser Ile Arg
 50 55 60
 His Asn Leu Ser Leu His Ser Arg Phe Met Arg Ile Gln Asn Glu Gly
 65 70 75 80
 Ala Gly Lys Ser Ser Trp Trp Val Ile Asn Pro Asp Ala Lys Pro Gly
 85 90 95
 Met Asn Pro Arg Arg Thr Arg Glu Arg Ser
 100 105

<210> 38
 <211> 60
 <212> PRT
 <213> Caenorhabditis elegans

<400> 38
 Glu Ile Lys Leu Ser Asp Phe Lys His Gln Leu Phe Glu Leu Ile Ala
 1 5 10 15
 Pro Met Lys Trp Gly Thr Tyr Ser Val Lys Pro Gln Asp Tyr Val Phe
 20 25 30
 Arg Gln Leu Asn Asn Phe Gly Glu Ile Glu Val Ile Phe Asn Asp Asp
 35 40 45
 Gln Pro Leu Ser Lys Leu Glu Leu His Gly Thr Phe
 50 55 60

<210> 39
 <211> 2784
 <212> DNA
 <213> Caenorhabditis elegans

<400> 39
 atgaagctaa tagcaacttc tcttctagtt cccgacgagc acacaccgat gatgtcacca 60
 gtgaatacaa ctacaaagat tctacaacgg agtgggtatta aaatggaaat cccgccatat 120
 ttggatccag acagtcagga tgatgacccg gaagatgggtg tcaactaccc ggatccagat 180
 ttatttgaca caaaaaacac aaatatgacc gagtacgatt tggatgtgtt gaagcttgga 240
 aaaccagcag tagatgaagc acggaaaaag atcgaagttc ccgacgctag tgcgccgcca 300
 aacaaaattg tagaatatth gatgtattat agaacgttaa aagaaagtga actcatacaa 360
 ctgaatgcgt atcggacaaa acgaaatcga ttatcgttga acttgggtcaa aaacaatatt 420
 gatcgagagt tcgacaaaaa agcttgcgag tccctgggtga aaaaattgaa ggataagaag 480
 aatgatctcc agaacctgat tgatgtgggt ctttcaaaaag gtacaaaata taccggttgc 540
 attacaattc caaggacact tgatggccgg ttacaggtcc acggaagaaa aggtttccct 600
 cacgtagtct atggcaaact gtggagggttt aatgaaatga caaaaaacga aacgcgtcat 660
 gtggaccact gcaagcacgc atttgaaatg aaaagtgaca tggatgcgt gaatccctat 720
 cactacgaaa ttgtcattgg aactatgatt gttgggcaga gggatcatga caatcgagat 780
 atgccgccgc cacatcaacg ctaccacact ccaggtcggc aggatccagt tgacgatatg 840
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 cagcctatgc ctcaacaatt gccttcagtt ggcgcaacgt ttgcccatcc tctcccat 960
 caggcgccac ataaccagc ggtttcacat ccgtactcca ttgctccaca gacccattac 1020
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 catcagggat atggaatgaa tgggcccagt tgctcttcag aaaacaacaa tccattccac 1140
 caaaatcacc attataatga tattagccat ccaaactcatt attcctacga ctgtggtccg 1200
 aacttgtagc gggttccaac tccttatccg gattttcacc atcctttcaa tcagcaacca 1260
 caccagccgc cacaactatc acaaaacat acgtcccaac aaggcagtca tcaaccaggg 1320
 caccaaggtc aggtaccgaa tgatccacca atttcaagac cagtgttaca accatcaaca 1380
 gtcaccttgg acgtgttccg tcggtactgt agacagacat ttggaaatcg attttttgaa 1440
 ggagaaaagt aacaatccgg cgcaataatt cggcttagta acaaattcat tgaagaattt 1500
 gattcgccga tttgtggtgt gacagttgtt cgaccgcgga tgacagacgg tgaggttttg 1560
 gagaacatca tgccggaaga tgcaccatat catgacattt gcaagttcat tttgaggctc 1620
 acatcagaaa gtgtaacttt ctgaggagag gggccagaag ttagtgattt gaacgaaaaa 1680
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 gagccaaatc caattagaga accagtggcg tttaaagtgc gtaaagcaat agtggatgga 1860
 attcgttttt cctacaaaaa agacgggagt gtttggttc aaaaccgcat gaagtaccgc 1920
 gtatttgcga cttctgggta tctcgacgag caatcaggag gcctaaagaa ggataaagtg 1980
 cacaaagttt acggatgtgc gtctatcaaa acgtttggct tcaacgtttc caaacaatc 2040
 atcagagacg cgcttctttc caagcaaatt gcaacaatgt acttgcaagg aaaattgact 2100
 ccgatgaatt atatctacga gaagaagact caggaagagc tgcgaaggga agcaacacgc 2160
 accactgatt cattggccaa gtactgttgt gtccgtgtct cgttctgcaa aggatttggga 2220

gaagcatacc	cagaacgccc	gtcaattcat	gattgtccag	tttggattga	gttgaaaatc	2280
aacattgcct	acgatttcat	ggattcaatc	tgccagtaca	taaccaactg	cttcgagccg	2340
ctaggaatgg	aagattttgc	aaaattggga	atcaacgtca	gtgatgacta	aatgataact	2400
tttttcactc	accctactag	atactgattt	agtcttattc	caaatacatcc	aacgatatca	2460
aactttttcc	tttgaacttt	gcatactatg	ttatcacaag	ttccaagcag	tttcaatata	2520
aacataggat	atgttaacaa	cttttgataa	gaatcaagtt	accaactggt	cattgtgagc	2580
tttgagctgt	atagaaggac	aatgtatccc	atacctcaat	ctttaatagt	catcagtcac	2640
tggtcccgcg	ccaatttttt	cgattcgcac	atgtcatata	ttgcaccgtg	gcccttttta	2700
ttgtaacttt	taatatattt	tcttccaac	ttgtgaatat	gattgatgaa	ccaccatttt	2760
gagtaataaa	tgtatttttt	gtgg				2784

<210> 40

<211> 796

<212> PRT

<213> *Caenorhabditis elegans*

<400> 40

Met	Lys	Leu	Ile	Ala	Thr	Ser	Leu	Leu	Val	Pro	Asp	Glu	His	Thr	Pro
1				5					10					15	
Met	Met	Ser	Pro	Val	Asn	Thr	Thr	Thr	Lys	Ile	Leu	Gln	Arg	Ser	Gly
			20					25					30		
Ile	Lys	Met	Glu	Ile	Pro	Pro	Tyr	Leu	Asp	Pro	Asp	Ser	Gln	Asp	Asp
		35					40					45			
Asp	Pro	Glu	Asp	Gly	Val	Asn	Tyr	Pro	Asp	Pro	Asp	Leu	Phe	Asp	Thr
	50					55					60				
Lys	Asn	Thr	Asn	Met	Thr	Glu	Tyr	Asp	Leu	Asp	Val	Leu	Lys	Leu	Gly
65					70				75						80
Lys	Pro	Ala	Val	Asp	Glu	Ala	Arg	Lys	Lys	Ile	Glu	Val	Pro	Asp	Ala
			85						90					95	
Ser	Ala	Pro	Pro	Asn	Lys	Ile	Val	Glu	Tyr	Leu	Met	Tyr	Tyr	Arg	Thr
			100					105					110		
Leu	Lys	Glu	Ser	Glu	Leu	Ile	Gln	Leu	Asn	Ala	Tyr	Arg	Thr	Lys	Arg
		115					120					125			
Asn	Arg	Leu	Ser	Leu	Asn	Leu	Val	Lys	Asn	Asn	Ile	Asp	Arg	Glu	Phe
	130					135					140				
Asp	Gln	Lys	Ala	Cys	Glu	Ser	Leu	Val	Lys	Lys	Leu	Lys	Asp	Lys	Lys
145					150					155					160
Asn	Asp	Leu	Gln	Asn	Leu	Ile	Asp	Val	Val	Leu	Ser	Lys	Gly	Thr	Lys
			165						170					175	
Tyr	Thr	Gly	Cys	Ile	Thr	Ile	Pro	Arg	Thr	Leu	Asp	Gly	Arg	Leu	Gln
		180						185					190		
Val	His	Gly	Arg	Lys	Gly	Phe	Pro	His	Val	Val	Tyr	Gly	Lys	Leu	Trp
		195					200					205			
Arg	Phe	Asn	Glu	Met	Thr	Lys	Asn	Glu	Thr	Arg	His	Val	Asp	His	Cys
	210					215					220				
Lys	His	Ala	Phe	Glu	Met	Lys	Ser	Asp	Met	Val	Cys	Val	Asn	Pro	Tyr
225					230					235					240
His	Tyr	Glu	Ile	Val	Ile	Gly	Thr	Met	Ile	Val	Gly	Gln	Arg	Asp	His
			245						250					255	
Asp	Asn	Arg	Asp	Met	Pro	Pro	Pro	His	Gln	Arg	Tyr	His	Thr	Pro	Gly
			260					265					270		
Arg	Gln	Asp	Pro	Val	Asp	Asp	Met	Ser	Arg	Phe	Ile	Pro	Pro	Ala	Ser
		275					280					285			
Ile	Arg	Pro	Pro	Pro	Met	Asn	Met	His	Thr	Arg	Pro	Gln	Pro	Met	Pro
	290					295						300			
Gln	Gln	Leu	Pro	Ser	Val	Gly	Ala	Thr	Phe	Ala	His	Pro	Leu	Pro	His
305					310					315					320
Gln	Ala	Pro	His	Asn	Pro	Gly	Val	Ser	His	Pro	Tyr	Ser	Ile	Ala	Pro
			325						330					335	

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<210> 41
 <211> 858
 <212> PRT
 <213> Caenorhabditis elegans

<400> 41
 Met Gly Asp His His Asn Leu Thr Gly Leu Pro Gly Thr Ser Ile Pro
 1 5 10 15
 Pro Gln Phe Asn Tyr Ser Gln Pro Gly Thr Ser Thr Gly Gly Pro Leu
 20 25 30
 Tyr Gly Gly Lys Pro Ser His Gly Leu Glu Asp Ile Pro Asp Val Glu
 35 40 45
 Glu Tyr Glu Arg Asn Leu Leu Gly Ala Gly Ala Gly Phe Asn Leu Leu
 50 55 60
 Asn Val Gly Asn Met Ala Asn Val Pro Asp Glu His Thr Pro Met Met
 65 70 75 80
 Ser Pro Val Asn Thr Thr Thr Lys Ile Leu Gln Arg Ser Gly Ile Lys
 85 90 95
 Met Glu Ile Pro Pro Tyr Leu Asp Pro Asp Ser Gln Asp Asp Asp Pro
 100 105 110
 Glu Asp Gly Val Asn Tyr Pro Asp Pro Asp Leu Phe Asp Thr Lys Asn
 115 120 125
 Thr Asn Met Thr Glu Tyr Asp Leu Asp Val Leu Lys Leu Gly Lys Pro
 130 135 140
 Ala Val Asp Glu Ala Arg Lys Lys Ile Glu Val Pro Asp Ala Ser Ala
 145 150 155 160
 Pro Pro Asn Lys Ile Val Glu Tyr Leu Met Tyr Tyr Arg Thr Leu Lys
 165 170 175
 Glu Ser Glu Leu Ile Gln Leu Asn Ala Tyr Arg Thr Lys Arg Asn Arg
 180 185 190
 Leu Ser Leu Asn Leu Val Lys Asn Asn Ile Asp Arg Glu Phe Asp Gln
 195 200 205
 Lys Ala Cys Glu Ser Leu Val Lys Lys Leu Lys Asp Lys Lys Asn Asp
 210 215 220
 Leu Gln Asn Leu Ile Asp Val Val Leu Ser Lys Gly Thr Lys Tyr Thr
 225 230 235 240
 Gly Cys Ile Thr Ile Pro Arg Thr Leu Asp Gly Arg Leu Gln Val His
 245 250 255
 Gly Arg Lys Gly Phe Pro His Val Val Tyr Gly Lys Leu Trp Arg Phe
 260 265 270
 Asn Glu Met Thr Lys Asn Glu Thr Arg His Val Asp His Cys Lys His
 275 280 285
 Ala Phe Glu Met Lys Ser Asp Met Val Cys Val Asn Pro Tyr His Tyr
 290 295 300
 Glu Ile Val Ile Gly Thr Met Ile Val Gly Gln Arg Asp His Asp Asn
 305 310 315 320
 Arg Asp Met Pro Pro His Gln Arg Tyr His Thr Pro Gly Arg Gln
 325 330 335
 Asp Pro Val Asp Asp Met Ser Arg Phe Ile Pro Pro Ala Ser Ile Arg
 340 345 350
 Pro Pro Pro Met Asn Met His Thr Arg Pro Gln Pro Met Pro Gln Gln
 355 360 365
 Leu Pro Ser Val Gly Ala Thr Phe Ala His Pro Leu Pro His Gln Ala
 370 375 380
 Pro His Asn Pro Gly Val Ser His Pro Tyr Ser Ile Ala Pro Gln Thr
 385 390 395 400
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 Gln Met Pro Pro Pro Leu His Gln Gly Tyr Gly Met Asn Gly Pro Ser

<212> PRT

<213> Caenorhabditis elegans

<400> 42

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Tyr	Gly	Gly	Lys	Pro	Ser	His	Gly	Leu	Glu	Asp	Ile	Pro	Asp	Val	Glu
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Glu	Tyr	Glu	Arg	Asn	Leu	Leu	Gly	Ala	Gly	Ala	Gly	Phe	Asn	Leu	Leu
	50					55					60				
Asn	Val	Gly	Asn	Met	Ala	Asn	Glu	Phe	Lys	Pro	Ile	Ile	Thr	Leu	Asp
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Thr	Lys	Pro	Pro	Arg	Asp	Ala	Asn	Lys	Ser	Leu	Ala	Phe	Asn	Gly	Gly
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Leu	Lys	Leu	Ile	Thr	Pro	Lys	Thr	Glu	Val	Pro	Asp	Glu	His	Thr	Pro
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Met	Met	Ser	Pro	Val	Asn	Thr	Thr	Thr	Lys	Ile	Leu	Gln	Arg	Ser	Gly
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Ile	Lys	Met	Glu	Ile	Pro	Pro	Tyr	Leu	Asp	Pro	Asp	Ser	Gln	Asp	Asp
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Asp	Pro	Glu	Asp	Gly	Val	Asn	Tyr	Pro	Asp	Pro	Asp	Leu	Phe	Asp	Thr
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Lys	Asn	Thr	Asn	Met	Thr	Glu	Tyr	Asp	Leu	Asp	Val	Leu	Lys	Leu	Gly
				165					170					175	
Lys	Pro	Ala	Val	Asp	Glu	Ala	Arg	Lys	Lys	Ile	Glu	Val	Pro	Asp	Ala
			180					185					190		
Ser	Ala	Pro	Pro	Asn	Lys	Ile	Val	Glu	Tyr	Leu	Met	Tyr	Tyr	Arg	Thr
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	210					215					220				
Asn	Arg	Leu	Ser	Leu	Asn	Leu	Val	Lys	Asn	Asn	Ile	Asp	Arg	Glu	Phe
225					230					235					240
Asp	Gln	Lys	Ala	Cys	Glu	Ser	Leu	Val	Lys	Lys	Leu	Lys	Asp	Lys	Lys
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Asn	Asp	Leu	Gln	Asn	Leu	Ile	Asp	Val	Val	Leu	Ser	Lys	Gly	Thr	Lys
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Tyr	Thr	Gly	Cys	Ile	Thr	Ile	Pro	Arg	Thr	Leu	Asp	Gly	Arg	Leu	Gln
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Val	His	Gly	Arg	Lys	Gly	Phe	Pro	His	Val	Val	Tyr	Gly	Lys	Leu	Trp
	290					295					300				
Arg	Phe	Asn	Glu	Met	Thr	Lys	Asn	Glu	Thr	Arg	His	Val	Asp	His	Cys
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Lys	His	Ala	Phe	Glu	Met	Lys	Ser	Asp	Met	Val	Cys	Val	Asn	Pro	Tyr
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His	Tyr	Glu	Ile	Val	Ile	Gly	Thr	Met	Ile	Val	Gly	Gln	Arg	Asp	His
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Arg	Gln	Asp	Pro	Val	Asp	Asp	Met	Ser	Arg	Phe	Ile	Pro	Pro	Ala	Ser
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Ile	Arg	Pro	Pro	Pro	Met	Asn	Met	His	Thr	Arg	Pro	Gln	Pro	Met	Pro
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Gln	Gln	Leu	Pro	Ser	Val	Gly	Ala	Thr	Phe	Ala	His	Pro	Leu	Pro	His
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Gln	Ala	Pro	His	Asn	Pro	Gly	Val	Ser	His	Pro	Tyr	Ser	Ile	Ala	Pro
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 <213> *Caenorhabditis elegans*

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 aatacaccgg atgatgtgat gatgaatgat gatatggaac cgattcctcg tgatcgggtgc 480
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 ctccgctggg catcttcaaa cgggtcgaca gcaatgcttc atactccaga tggaaagcaat 660
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 <212> PRT
 <213> Caenorhabditis elegans

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 35 40 45
 Arg Asp Arg Cys Asn Thr Trp Pro Met Arg Arg Pro Gln Leu Glu Pro
 50 55 60
 Pro Leu Asn Ser Ser Pro Ile Ile His Glu Gln Ile Pro Glu Glu Asp
 65 70 75 80
 Ala Asp Leu Tyr Gly Ser Asn Glu Gln Cys Gly Gln Leu Gly Gly Ala
 85 90 95
 Ser Ser Asn Gly Ser Thr Ala Met Leu His Thr Pro Asp Gly Ser Asn
 100 105 110
 Ser His Gln Thr Ser Phe Pro Ser Asp Phe Arg Met Ser Glu Ser Pro
 115 120 125
 Asp Asp Thr Val Ser Gly Lys Lys Thr Thr Thr Arg Arg Asn Ala Trp
 130 135 140
 Gly Asn Met Ser Tyr Ala Glu Leu Ile Thr Thr Ala Ile Met Ala Ser
 145 150 155 160
 Pro Glu Lys Arg Leu Thr Leu Ala Gln Val Tyr Glu Trp Met Val Gln
 165 170 175
 Asn Val Pro Tyr Phe Arg Asp Lys Gly Asp Ser Asn Ser Ser Ala Gly
 180 185 190
 Trp Lys Asn Ser Ile Arg His Asn Leu Ser Leu His Ser Arg Phe Met
 195 200 205
 Arg Ile Gln Asn Glu Gly Ala Gly Lys Ser Ser Trp Trp Val Ile Asn
 210 215 220
 Pro Asp Ala Lys Pro Gly Met Asn Pro Arg Arg Thr Arg Glu Arg Ser
 225 230 235 240
 Asn Thr Ile Glu Thr Thr Thr Lys Ala Gln Leu Glu Lys Ser Arg Arg
 245 250 255
 Gly Ala Lys Lys Arg Ile Lys Glu Arg Ala Leu Met Gly Ser Leu His
 260 265 270
 Ser Thr Leu Asn Gly Asn Ser Ile Ala Gly Ser Ile Gln Thr Ile Ser
 275 280 285
 His Asp Leu Tyr Asp Asp Asp Ser Met Gln Gly Ala Phe Asp Asn Val
 290 295 300
 Pro Ser Ser Phe Arg Pro Arg Thr Gln Ser Asn Leu Ser Ile Pro Gly
 305 310 315 320
 Ser Ser Ser Arg Val Ser Pro Ala Ile Gly Ser Asp Ile Tyr Asp Asp
 325 330 335
 Leu Glu Phe Pro Ser Trp Val Gly Glu Ser Val Pro Ala Ile Pro Ser
 340 345 350
 Asp Ile Val Asp Arg Thr Asp Gln Met Arg Ile Asp Ala Thr Thr His
 355 360 365
 Ile Gly Gly Val Gln Ile Lys Gln Glu Ser Lys Pro Ile Lys Thr Glu
 370 375 380
 Pro Ile Ala Pro Pro Pro Ser Tyr His Glu Leu Asn Ser Val Arg Gly
 385 390 395 400
 Ser Cys Ala Gln Asn Pro Leu Leu Arg Asn Pro Ile Val Pro Ser Thr
 405 410 415
 Asn Phe Lys Pro Met Pro Leu Pro Gly Ala Tyr Gly Asn Tyr Gln Asn

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<210> 46
 <211> 509
 <212> PRT
 <213> Caenorhabditis elegans

<400> 46

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Gln	Leu	Pro	His	Met	Gln	Gln	Leu	Pro	Gln	Pro	Leu	Leu	Asn	Leu	Asn		
	35						40					45					
Met	Thr	Thr	Leu	Thr	Ser	Ser	Gly	Ser	Ser	Val	Ala	Ser	Ser	Ile	Gly		
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Gly	Gly	Ala	Gln	Cys	Ser	Pro	Cys	Ala	Ser	Gly	Ser	Ser	Thr	Ala	Ala		
65				70					75					80			
Thr	Asn	Ser	Ser	Gln	Gln	Gln	Thr	Val	Gly	Gln	Met	Leu	Ala	Ala			
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Ser	Val	Pro	Cys	Ser	Ser	Ser	Gly	Met	Thr	Leu	Gly	Met	Ser	Leu	Asn		
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Leu	Ser	Gln	Gly	Gly	Gly	Pro	Met	Pro	Ala	Lys	Lys	Lys	Arg	Cys	Arg		
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Lys	Lys	Pro	Thr	Asp	Gln	Leu	Ala	Gln	Lys	Lys	Pro	Asn	Pro	Trp	Gly		
	130				135						140						
Glu	Glu	Ser	Tyr	Ser	Asp	Ile	Ile	Ala	Lys	Ala	Leu	Glu	Ser	Ala	Pro		
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Ile	Pro	Tyr	Phe	Gly	Glu	Arg	Ser	Ser	Pro	Glu	Glu	Ala	Ala	Gly	Trp		
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	195					200						205					
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Asp	Ala	Lys	Pro	Gly	Met	Asn	Pro	Arg	Arg	Thr	Arg	Glu	Arg	Ser	Asn		
225				230						235				240			
Thr	Ile	Glu	Thr	Thr	Thr	Lys	Ala	Gln	Leu	Glu	Lys	Ser	Arg	Arg	Gly		
			245					250						255			
Ala	Lys	Lys	Arg	Ile	Lys	Glu	Arg	Ala	Leu	Met	Gly	Ser	Leu	His	Ser		
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Thr	Leu	Asn	Gly	Asn	Ser	Ile	Ala	Gly	Ser	Ile	Gln	Thr	Ile	Ser	His		
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 340 345 350
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 355 360 365
 Gly Gly Val Gln Ile Lys Gln Glu Ser Lys Pro Ile Lys Thr Glu Pro
 370 375 380
 Ile Ala Pro Pro Pro Ser Tyr His Glu Leu Asn Ser Val Arg Gly Ser
 385 390 395 400
 Cys Ala Gln Asn Pro Leu Leu Arg Asn Pro Ile Val Pro Ser Thr Asn
 405 410 415
 Phe Lys Pro Met Pro Leu Pro Gly Ala Tyr Gly Asn Tyr Gln Asn Gly
 420 425 430
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<400> 48

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 <212> DNA
 <213> *Caenorhabditis elegans*

<400> 53						
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aagttcccga	cgagcacaca	ccgatgatgt	caccagtga	tacaactaca	aagattctac	420
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<210> 54
 <211> 103
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 54

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			20					25					30		
Leu	Ala	Gln	Val	Tyr	Glu	Trp	Met	Val	Gln	Asn	Val	Pro	Tyr	Phe	Arg
		35					40					45			
Asp	Lys	Gly	Asp	Ser	Asn	Ser	Ser	Ala	Gly	Trp	Lys	Asn	Ser	Ile	Arg
	50					55					60				
His	Asn	Leu	Ser	Leu	His	Ser	Arg	Phe	Met	Arg	Ile	Gln	Asn	Glu	Gly
65					70					75				80	
Ala	Gly	Lys	Ser	Ser	Trp	Trp	Val	Ile	Asn	Pro	Asp	Ala	Lys	Pro	Gly

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85

90

95

<210> 55
 <211> 41
 <212> PRT
 <213> Caenorhabditis elegans

<400> 55
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 Pro Ile Pro Arg Asp Arg Cys Asn Thr Trp Pro Met Arg Arg Pro Gln
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 Leu Glu Pro Pro Leu Asn Ser Ser Pro
 35 40

<210> 56
 <211> 109
 <212> PRT
 <213> Caenorhabditis elegans

<400> 56
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 Gly Asn Met Ser Tyr Ala Glu Leu Ile Thr Thr Ala Ile Met Ala Ser
 20 25 30
 Pro Glu Lys Arg Leu Thr Leu Ala Gln Val Tyr Glu Trp Met Val Gln
 35 40 45
 Asn Val Pro Tyr Phe Arg Asp Lys Gly Asp Ser Asn Ser Ser Ala Gly
 50 55 60
 Trp Lys Asn Ser Ile Arg His Asn Leu Ser Leu His Ser Arg Phe Met
 65 70 75 80
 Arg Ile Gln Asn Glu Gly Ala Gly Lys Ser Ser Trp Trp Val Ile Asn
 85 90 95
 Pro Asp Ala Lys Pro Gly Met Asn Pro Arg Arg Thr Arg
 100 105

<210> 57
 <211> 655
 <212> PRT
 <213> Homo sapiens

<400> 57
 Met Ala Glu Ala Pro Gln Val Val Glu Ile Asp Pro Asp Phe Glu Pro
 1 5 10 15
 Leu Pro Arg Pro Arg Ser Cys Thr Trp Pro Leu Pro Arg Pro Glu Phe
 20 25 30
 Ser Gln Ser Asn Ser Ala Thr Ser Ser Pro Ala Pro Ser Gly Ser Ala
 35 40 45
 Ala Ala Asn Pro Asp Ala Ala Gly Leu Pro Ser Ala Ser Ala Ala
 50 55 60
 Ala Val Ser Ala Asp Phe Met Ser Asn Leu Ser Leu Leu Glu Glu Ser
 65 70 75 80
 Glu Asp Phe Pro Gln Ala Pro Gly Ser Val Ala Ala Ala Val Ala Ala
 85 90 95

Ala	Ala	Ala	Ala	Ala	Ala	Thr	Gly	Gly	Leu	Cys	Gly	Asp	Phe	Gln	Gly	
			100					105					110			
Pro	Glu	Ala	Gly	Cys	Leu	His	Pro	Ala	Pro	Pro	Gln	Pro	Pro	Pro	Pro	
		115					120					125				
Gly	Pro	Val	Ser	Gln	His	Pro	Pro	Val	Pro	Pro	Ala	Ala	Ala	Gly	Pro	
	130				135						140					
Leu	Ala	Gly	Gln	Pro	Arg	Lys	Ser	Ser	Ser	Ser	Arg	Arg	Asn	Ala	Trp	
145					150					155					160	
Gly	Asn	Leu	Ser	Tyr	Ala	Asp	Leu	Ile	Thr	Lys	Ala	Ile	Glu	Ser	Ser	
				165					170					175		
Ala	Glu	Lys	Arg	Leu	Thr	Leu	Ser	Gln	Ile	Tyr	Glu	Trp	Met	Val	Lys	
			180					185					190			
Ser	Val	Pro	Tyr	Phe	Lys	Asp	Lys	Gly	Asp	Ser	Asn	Ser	Ser	Ala	Gly	
	195						200					205				
Trp	Lys	Asn	Ser	Ile	Arg	His	Asn	Leu	Ser	Leu	His	Ser	Lys	Phe	Ile	
	210					215					220					
Arg	Val	Gln	Asn	Glu	Gly	Thr	Gly	Lys	Ser	Ser	Trp	Trp	Met	Leu	Asn	
225					230					235					240	
Pro	Glu	Gly	Gly	Lys	Ser	Gly	Lys	Ser	Pro	Arg	Arg	Arg	Ala	Ala	Ser	
				245					250					255		
Met	Asp	Asn	Asn	Ser	Lys	Phe	Ala	Lys	Ser	Arg	Ser	Arg	Ala	Ala	Lys	
			260					265					270			
Lys	Lys	Ala	Ser	Leu	Gln	Ser	Gly	Gln	Glu	Gly	Ala	Gly	Asp	Ser	Pro	
		275					280					285				
Gly	Ser	Gln	Phe	Ser	Lys	Trp	Pro	Ala	Ser	Pro	Gly	Ser	His	Ser	Asn	
	290					295					300					
Asp	Asp	Phe	Asp	Asn	Trp	Ser	Thr	Phe	Arg	Pro	Arg	Thr	Ser	Ser	Asn	
305					310					315					320	
Ala	Ser	Thr	Ile	Ser	Gly	Arg	Leu	Ser	Pro	Ile	Met	Thr	Glu	Gln	Asp	
				325					330					335		
Asp	Leu	Gly	Glu	Gly	Asp	Val	His	Ser	Met	Val	Tyr	Pro	Pro	Ser	Ala	
			340					345					350			
Ala	Lys	Met	Ala	Ser	Thr	Leu	Pro	Ser	Leu	Ser	Glu	Ile	Ser	Asn	Pro	
		355					360					365				
Glu	Asn	Met	Glu	Asn	Leu	Leu	Asp	Asn	Leu	Asn	Leu	Leu	Ser	Ser	Pro	
	370					375					380					
Thr	Ser	Leu	Thr	Val	Ser	Thr	Gln	Ser	Ser	Pro	Gly	Thr	Met	Met	Gln	
385					390					395					400	
Gln	Thr	Pro	Cys	Tyr	Ser	Phe	Ala	Pro	Pro	Asn	Thr	Ser	Leu	Asn	Ser	
			405						410					415		
Pro	Ser	Pro	Asn	Tyr	Gln	Lys	Tyr	Thr	Tyr	Gly	Gln	Ser	Ser	Met	Ser	
			420					425					430			
Pro	Leu	Pro	Gln	Met	Pro	Ile	Gln	Thr	Leu	Gln	Asp	Asn	Lys	Ser	Ser	
		435				440						445				
Tyr	Gly	Gly	Met	Ser	Gln	Tyr	Asn	Cys	Ala	Pro	Gly	Leu	Leu	Lys	Glu	
	450					455					460					
Leu	Leu	Thr	Ser	Asp	Ser	Pro	Pro	His	Asn	Asp	Ile	Met	Thr	Pro	Val	
465					470					475					480	
Asp	Pro	Gly	Val	Ala	Gln	Pro	Asn	Ser	Arg	Val	Leu	Gly	Gln	Asn	Val	
				485					490					495		
Met	Met	Gly	Pro	Asn	Ser	Val	Met	Ser	Thr	Tyr	Gly	Ser	Gln	Ala	Ser	
			500					505					510			
His	Asn	Lys	Met	Met	Asn	Pro	Ser	Ser	His	Thr	His	Pro	Gly	His	Ala	
		515					520					525				
Gln	Gln	Thr	Ser	Ala	Val	Asn	Gly	Arg	Pro	Leu	Pro	His	Thr	Val	Ser	
	530					535					540					
Thr	Met	Pro	His	Thr	Ser	Gly	Met	Asn	Arg	Leu	Thr	Gln	Val	Lys	Thr	
545					550					555					560	
Pro	Val	Gln	Val	Pro	Leu	Pro	His	Pro	Met	Gln	Met	Ser	Ala	Leu	Gly	

				565					570					575			
Gly	Tyr	Ser	Ser	Val	Ser	Ser	Cys	Asn	Gly	Tyr	Gly	Arg	Met	Gly	Leu		
			580					585					590				
Leu	His	Gln	Glu	Lys	Leu	Pro	Ser	Asp	Leu	Asp	Gly	Met	Phe	Ile	Glu		
		595					600					605					
Arg	Leu	Asp	Cys	Asp	Met	Glu	Ser	Ile	Ile	Arg	Asn	Asp	Leu	Met	Asp		
	610					615					620						
Gly	Asp	Thr	Leu	Asp	Phe	Asn	Phe	Asp	Asn	Val	Leu	Pro	Asn	Gln	Ser		
625					630					635					640		
Phe	Pro	His	Ser	Val	Lys	Thr	Thr	Thr	His	Ser	Trp	Val	Ser	Gly			
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<210> 58
 <211> 98
 <212> PRT
 <213> Caenorhabditis elegans

<400> 58

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Ala	Leu	Glu	Ser	Ala	Pro	Asp	Gly	Arg	Leu	Lys	Leu	Asn	Glu	Ile	Tyr		
		20					25						30				
Gln	Trp	Phe	Ser	Asp	Asn	Ile	Pro	Tyr	Phe	Gly	Glu	Arg	Ser	Ser	Pro		
	35					40						45					
Glu	Glu	Ala	Ala	Gly	Trp	Lys	Asn	Ser	Ile	Arg	His	Asn	Leu	Ser	Leu		
	50					55					60						
His	Ser	Arg	Phe	Met	Arg	Ile	Gln	Asn	Glu	Gly	Ala	Gly	Lys	Ser	Ser		
65					70					75					80		
Trp	Trp	Val	Ile	Asn	Pro	Asp	Ala	Lys	Pro	Gly	Met	Asn	Pro	Arg	Arg		
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Thr Arg

<210> 59
 <211> 7
 <212> PRT
 <213> Caenorhabditis elegans

<400> 59

Trp	Lys	Asn	Ser	Ile	Arg	His											
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<210> 60
 <211> 121
 <212> PRT
 <213> Caenorhabditis elegans

<400> 60

Gln	Val	Leu	Asp	Asp	His	Asp	Tyr	Gly	Arg	Cys	Val	Asp	Trp	Trp	Gly		
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Val	Gly	Val	Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr		
		20					25						30				
Ser	Lys	Asp	His	Asn	Lys	Leu	Phe	Glu	Leu	Ile	Met	Ala	Gly	Asp	Leu		
	35					40						45					
Arg	Phe	Pro	Ser	Lys	Leu	Ser	Gln	Glu	Ala	Arg	Thr	Leu	Leu	Thr	Gly		
	50					55					60						

Leu Leu Val Lys Asp Pro Thr Gln Arg Leu Gly Gly Gly Pro Glu Asp
 65 70 75 80
 Ala Leu Glu Ile Cys Arg Ala Asp Phe Phe Arg Thr Val Asp Trp Glu
 85 90 95
 Ala Thr Tyr Arg Lys Glu Ile Glu Pro Tyr Lys Pro Asn Val Gln
 100 105 110
 Ser Glu Thr Asp Thr Ser Tyr Phe Asp
 115 120

<210> 61
 <211> 66
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 61
 Thr Met Glu Asp Phe Asp Phe Leu Lys Val Leu Gly Lys Gly Thr Phe
 1 5 10 15
 Gly Lys Val Ile Leu Cys Lys Glu Lys Arg Thr Gln Lys Leu Tyr Ala
 20 25 30
 Ile Lys Ile Leu Lys Lys Asp Val Ile Ile Ala Arg Glu Glu Val Ala
 35 40 45
 His Thr Leu Thr Glu Asn Arg Val Leu Gln Arg Cys Lys His Pro Phe
 50 55 60
 Leu Thr
 65

<210> 62
 <211> 45
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 62
 Lys Leu Glu Asn Leu Leu Leu Asp Lys Asp Gly His Ile Lys Ile Ala
 1 5 10 15
 Asp Phe Gly Leu Cys Lys Glu Glu Ile Ser Phe Gly Asp Lys Thr Ser
 20 25 30
 Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val
 35 40 45

<210> 63
 <211> 57
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 63
 Tyr Phe Gln Glu Leu Lys Tyr Ser Phe Gln Glu Gln His Tyr Leu Cys
 1 5 10 15
 Phe Val Met Gln Phe Ala Asn Gly Gly Glu Leu Phe Thr His Val Arg
 20 25 30
 Lys Cys Gly Thr Phe Ser Glu Pro Arg Ala Arg Phe Tyr Gly Ala Glu
 35 40 45
 Ile Val Leu Ala Leu Gly Tyr Leu His
 50 55

<210> 64

<211> 59
 <212> PRT
 <213> Caenorhabditis elegans

<400> 64
 Ser Thr Phe Ala Ile Phe Tyr Phe Gln Thr Met Leu Phe Glu Lys Pro
 1 5 10 15
 Arg Pro Asn Met Phe Met Val Arg Cys Leu Gln Trp Thr Thr Val Ile
 20 25 30
 Glu Arg Thr Phe Tyr Ala Glu Ser Ala Glu Val Arg Gln Arg Trp Ile
 35 40 45
 His Ala Ile Glu Ser Ile Ser Lys Lys Tyr Lys
 50 55

<210> 65
 <211> 33
 <212> PRT
 <213> Caenorhabditis elegans

<400> 65
 Leu Gln Glu Leu Lys Tyr Ser Phe Gln Thr Asn Asp Arg Leu Cys Phe
 1 5 10 15
 Val Met Glu Phe Ala Ile Gly Gly Asp Leu Tyr Tyr His Leu Asn Arg
 20 25 30
 Glu

<210> 66
 <211> 21
 <212> PRT
 <213> Caenorhabditis elegans

<400> 66
 Val Val Ile Glu Gly Trp Leu His Lys Lys Gly Glu His Ile Arg Asn
 1 5 10 15
 Trp Arg Pro Arg Phe
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<210> 67
 <211> 26
 <212> PRT
 <213> Caenorhabditis elegans

<400> 67
 Phe Ser Glu Pro Arg Ala Arg Phe Tyr Gly Ser Glu Ile Val Leu Ala
 1 5 10 15
 Leu Gly Tyr Leu His Ala Asn Ser Ile Val
 20 25

<210> 68
 <211> 39
 <212> PRT
 <213> Caenorhabditis elegans

<400> 68

Ile Arg Val Ser Phe Cys Lys Gly Phe Gly Glu Thr Tyr Ser Arg Leu
 1 5 10 15
 Lys Val Val Asn Leu Pro Cys Trp Ile Glu Ile Ile Leu His Glu Pro
 20 25 30
 Ala Asp Glu Tyr Asp Thr Val
 35

<210> 69
 <211> 45
 <212> PRT
 <213> Caenorhabditis elegans

<400> 69
 Ser Arg Asn Ser Lys Ser Ser Gln Ile Arg Asn Thr Val Gly Ala Gly
 1 5 10 15
 Ile Gln Leu Ala Tyr Glu Asn Gly Glu Leu Trp Leu Thr Val Leu Thr
 20 25 30
 Asp Gln Ile Val Phe Val Gln Cys Pro Phe Leu Asn Gln
 35 40 45

<210> 70
 <211> 29
 <212> PRT
 <213> Caenorhabditis elegans

<400> 70
 Asn Glu Met Leu Asp Pro Glu Pro Lys Tyr Pro Lys Glu Glu Lys Pro
 1 5 10 15
 Trp Cys Thr Ile Phe Tyr Tyr Glu Leu Thr Val Arg Val
 20 25

<210> 71
 <211> 29
 <212> PRT
 <213> Caenorhabditis elegans

<400> 71
 Gln Leu Gly Lys Ala Phe Glu Ala Lys Val Pro Thr Ile Thr Ile Asp
 1 5 10 15
 Gly Ala Thr Gly Ala Ser Asp Glu Cys Arg Met Ser Leu
 20 25

<210> 72
 <211> 105
 <212> PRT
 <213> Caenorhabditis elegans

<400> 72
 Ser Pro Asp Asp Gly Leu Leu Asp Ser Ser Glu Glu Ser Arg Arg Arg
 1 5 10 15
 Gln Lys Thr Cys Arg Val Cys Gly Asp His Ala Thr Gly Tyr Asn Phe
 20 25 30
 Asn Val Ile Thr Cys Glu Ser Cys Lys Ala Phe Phe Arg Arg Asn Ala
 35 40 45
 Leu Arg Pro Lys Glu Phe Lys Cys Pro Tyr Ser Glu Asp Cys Glu Ile

50		55		60
Asn Ser Val Ser Arg Arg Phe Cys Gln Lys Cys Arg Leu Arg Lys Cys				
65		70		75
Phe Thr Val Gly Met Lys Lys Glu Trp Ile Leu Asn Glu Glu Gln Leu				80
	85		90	95
Arg Arg Arg Lys Asn Ser Arg Leu Asn				
100		105		

<210> 73
 <211> 89
 <212> PRT
 <213> Caenorhabditis elegans

<400> 73

Leu Asp Ser Ser Glu Glu Ser Arg Arg Arg Gln Lys Thr Cys Arg Val	
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	15
	20
Ser Cys Lys Ala Phe Phe Arg Arg Asn Ala Leu Arg Pro Lys Glu Phe	25
	30
	35
	40
	45
Lys Cys Pro Tyr Ser Glu Asp Cys Glu Ile Asn Ser Val Ser Arg Arg	50
	55
	60
Phe Cys Gln Lys Cys Arg Leu Arg Lys Cys Phe Thr Val Gly Met Lys	65
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	75
	80
Lys Glu Trp Ile Leu Asn Glu Glu Gln	
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<210> 74
 <211> 73
 <212> PRT
 <213> Caenorhabditis elegans

<400> 74

Asp Ile Met Asn Ile Met Asp Val Thr Met Arg Arg Phe Val Lys Val	
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	10
	15
Ala Lys Gly Val Pro Ala Phe Arg Glu Val Ser Gln Glu Gly Lys Phe	20
	25
	30
Ser Leu Leu Lys Gly Gly Met Ile Glu Met Leu Thr Val Arg Gly Val	35
	40
	45
Thr Arg Tyr Asp Ala Ser Thr Asn Ser Phe Lys Thr Pro Thr Ile Lys	50
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	60
Gly Gln Asn Val Ser Val Asn Val Asp	65
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<210> 75
 <211> 112
 <212> PRT
 <213> Caenorhabditis elegans

<400> 75

Ser Gly Ser Leu Val Asp Leu Met Ile Lys Asn Leu Thr Ala Tyr Thr	
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	10
	15
Gln Gly Leu Asn Glu Thr Val Lys Asn Arg Thr Ala Glu Leu Glu Lys	20
	25
	30
Glu Gln Glu Lys Gly Asp Gln Leu Leu Met Glu Leu Leu Pro Lys Ser	35
	40
	45

Val Ala Asn Asp Leu Lys Asn Gly Ile Ala Val Asp Pro Lys Val Tyr
50 55 60
Glu Asn Ala Thr Ile Leu Tyr Ser Asp Ile Val Gly Phe Thr Ser Leu
65 70 75 80
Cys Ser Gln Ser Gln Pro Met Glu Val Val Thr Leu Leu Ser Gly Met
85 90 95
Tyr Gln Arg Phe Asp Leu Ile Ile Ser Gln Gln Gly Gly Tyr Lys Val
100 105 110

<210> 76
<211> 107
<212> PRT
<213> *Caenorhabditis elegans*

<400> 76
Met Glu Thr Ile Gly Asp Ala Tyr Cys Val Ala Ala Gly Leu Pro Val
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Val Met Glu Lys Asp His Val Lys Ser Ile Cys Met Ile Ala Leu Leu
20 25 30
Gln Arg Asp Cys Leu His His Phe Glu Ile Pro His Arg Pro Gly Thr
35 40 45
Phe Leu Asn Cys Arg Trp Gly Phe Asn Ser Gly Pro Val Phe Ala Gly
50 55 60
Val Ile Gly Gln Lys Ala Pro Arg Tyr Ala Cys Phe Gly Glu Ala Val
65 70 75 80
Ile Leu Ala Ser Lys Met Glu Ser Ser Gly Val Glu Asp Arg Ile Gln
85 90 95
Met Thr Leu Ala Ser Gln Gln Leu Leu Glu Glu
100 105

<210> 77
<211> 43
<212> PRT
<213> *Caenorhabditis elegans*

<400> 77
Asp Ile Leu Lys Gly Leu Glu Tyr Ile His Ala Ser Ala Ile Asp Phe
1 5 10 15
His Gly Asn Leu Thr Leu His Asn Cys Met Leu Asp Ser His Trp Ile
20 25 30
Val Lys Leu Ser Gly Phe Gly Val Asn Arg Leu
35 40

<210> 78
<211> 15
<212> PRT
<213> *Caenorhabditis elegans*

<400> 78
Asp Met Tyr Ser Phe Gly Val Ile Leu His Glu Ile Ile Leu Lys
1 5 10 15

<210> 79
<211> 67
<212> PRT

<213> Caenorhabditis elegans

<400> 79

```
Ala Ile Lys Ile Asn Val Asp Asp Pro Ala Ser Thr Glu Asn Leu Asn
 1          5          10          15
Tyr Leu Met Glu Ala Asn Ile Met Lys Asn Phe Lys Thr Asn Phe Ile
          20          25          30
Val Gln Leu Tyr Gly Val Ile Ser Thr Val Gln Pro Ala Met Val Val
          35          40          45
Met Glu Met Met Asp Leu Gly Asn Leu Arg Asp Tyr Leu Arg Ser Lys
          50          55          60
Arg Glu Asp
65
```

<210> 80

<211> 54

<212> PRT

<213> Caenorhabditis elegans

<400> 80

```
Val Ile Lys Lys Pro Glu Cys Cys Glu Asn Tyr Trp Tyr Lys Val Met
 1          5          10          15
Lys Met Cys Trp Arg Tyr Ser Pro Arg Asp Arg Pro Thr Phe Leu Gln
          20          25          30
Leu Val His Leu Leu Ala Ala Glu Ala Ser Pro Glu Phe Arg Asp Leu
          35          40          45
Ser Phe Val Leu Thr Asp
50
```

<210> 81

<211> 69

<212> PRT

<213> Caenorhabditis elegans

<400> 81

```
Lys Gln Asp Ser Gly Met Ala Ser Glu Leu Lys Asp Ile Phe Ala Asn
 1          5          10          15
Ile His Thr Ile Thr Gly Tyr Leu Leu Val Arg Gln Ser Ser Pro Phe
          20          25          30
Ile Ser Leu Asn Met Phe Arg Asn Leu Arg Arg Ile Glu Ala Lys Ser
          35          40          45
Leu Phe Arg Asn Leu Tyr Ala Ile Thr Val Phe Glu Asn Pro Asn Leu
          50          55          60
Lys Lys Leu Phe Asp
65
```

<210> 82

<211> 52

<212> PRT

<213> Caenorhabditis elegans

<400> 82

```
Phe Pro His Leu Arg Glu Ile Thr Gly Thr Leu Leu Val Phe Glu Thr
 1          5          10          15
Glu Gly Leu Val Asp Leu Arg Lys Ile Phe Pro Asn Leu Arg Val Ile
          20          25          30
```

Gly Gly Arg Ser Leu Ile Gln His Tyr Ala Leu Ile Ile Tyr Arg Asn
 35 40 45
 Pro Asp Leu Glu
 50

<210> 83
 <211> 46
 <212> PRT
 <213> Caenorhabditis elegans

<400> 83
 Glu Ile Gly Leu Asp Lys Leu Ser Val Ile Arg Asn Gly Gly Val Arg
 1 5 10 15
 Ile Ile Asp Asn Arg Lys Leu Cys Tyr Thr Lys Thr Ile Asp Trp Lys
 20 25 30
 His Leu Ile Thr Ser Ser Ile Asn Asp Val Val Val Asp Asn
 35 40 45

<210> 84
 <211> 36
 <212> PRT
 <213> Caenorhabditis elegans

<400> 84
 Tyr Asn Ala Asp Asp Trp Glu Leu Arg Gln Asp Asp Val Val Leu Gly
 1 5 10 15
 Gln Gln Cys Gly Glu Gly Ser Phe Gly Lys Val Tyr Leu Gly Thr Gly
 20 25 30
 Asn Asn Val Val
 35

<210> 85
 <211> 24
 <212> PRT
 <213> Caenorhabditis elegans

<400> 85
 Asp Ser Leu Ala Lys Tyr Cys Cys Val Arg Val Ser Phe Cys Lys Gly
 1 5 10 15
 Phe Gly Glu Ala Tyr Pro Glu Arg
 20

<210> 86
 <211> 13
 <212> PRT
 <213> Caenorhabditis elegans

<400> 86
 Gly Trp Asp Trp Ile Val Ala Pro Pro Arg Tyr Asn Ala
 1 5 10

<210> 87
 <211> 121
 <212> PRT

<213> Homo sapiens

<400> 87

Glu	Val	Leu	Glu	Asp	Asn	Asp	Tyr	Gly	Arg	Ala	Val	Asp	Trp	Trp	Gly
1				5					10					15	
Leu	Gly	Val	Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr
			20					25					30		
Asn	Gln	Asp	His	Glu	Lys	Leu	Phe	Glu	Leu	Ile	Leu	Met	Glu	Glu	Ile
		35					40					45			
Arg	Phe	Pro	Arg	Thr	Leu	Gly	Pro	Glu	Ala	Lys	Ser	Leu	Leu	Ser	Gly
	50					55					60				
Leu	Leu	Lys	Lys	Asp	Pro	Thr	Gln	Arg	Leu	Gly	Gly	Gly	Ser	Glu	Asp
65					70					75					80
Ala	Lys	Glu	Ile	Met	Gln	His	Arg	Phe	Phe	Ala	Asn	Ile	Val	Trp	Gln
				85					90					95	
Asp	Val	Tyr	Glu	Lys	Lys	Leu	Ser	Pro	Pro	Phe	Lys	Pro	Gln	Val	Thr
			100					105					110		
Ser	Glu	Thr	Asp	Thr	Arg	Tyr	Phe	Asp							
			115					120							

<210> 88

<211> 121

<212> PRT

<213> Caenorhabditis elegans

<400> 88

Gln	Val	Leu	Asp	Asp	His	Asp	Tyr	Gly	Arg	Cys	Val	Asp	Trp	Trp	Gly
1				5					10					15	
Val	Gly	Val	Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr
			20					25					30		
Ser	Lys	Asp	His	Asn	Lys	Leu	Phe	Glu	Leu	Ile	Met	Ala	Gly	Asp	Leu
		35					40					45			
Arg	Phe	Pro	Ser	Lys	Leu	Ser	Gln	Glu	Ala	Arg	Thr	Leu	Leu	Thr	Gly
	50					55					60				
Leu	Leu	Val	Lys	Asp	Pro	Thr	Gln	Arg	Leu	Gly	Gly	Gly	Pro	Glu	Asp
65					70					75					80
Ala	Leu	Glu	Ile	Cys	Arg	Ala	Asp	Phe	Phe	Arg	Thr	Val	Asp	Trp	Glu
				85					90					95	
Ala	Thr	Tyr	Arg	Lys	Glu	Ile	Glu	Pro	Pro	Tyr	Lys	Pro	Asn	Val	Gln
			100					105					110		
Ser	Glu	Thr	Asp	Thr	Ser	Tyr	Phe	Asp							
			115					120							

<210> 89

<211> 66

<212> PRT

<213> Homo sapiens

<400> 89

Thr	Met	Asn	Glu	Phe	Glu	Tyr	Leu	Lys	Leu	Leu	Gly	Lys	Gly	Thr	Phe
1				5					10					15	
Gly	Lys	Val	Ile	Leu	Val	Lys	Glu	Lys	Ala	Thr	Gly	Arg	Tyr	Tyr	Ala
			20					25					30		
Met	Lys	Ile	Leu	Lys	Lys	Glu	Val	Ile	Val	Ala	Lys	Asp	Glu	Val	Ala
		35					40					45			
His	Thr	Leu	Thr	Glu	Asn	Arg	Val	Leu	Gln	Asn	Ser	Arg	His	Pro	Phe
	50					55					60				

Leu Thr
65

<210> 90
<211> 66
<212> PRT
<213> *Caenorhabditis elegans*

<400> 90
Thr Met Glu Asp Phe Asp Phe Leu Lys Val Leu Gly Lys Gly Thr Phe
1 5 10 15
Gly Lys Val Ile Leu Cys Lys Glu Lys Arg Thr Gln Lys Leu Tyr Ala
20 25 30
Ile Lys Ile Leu Lys Lys Asp Val Ile Ile Ala Arg Glu Glu Val Ala
35 40 45
His Thr Leu Thr Glu Asn Arg Val Leu Gln Arg Cys Lys His Pro Phe
50 55 60
Leu Thr
65

<210> 91
<211> 45
<212> PRT
<213> *Homo sapiens*

<400> 91
Lys Leu Glu Asn Leu Met Leu Asp Lys Asp Gly His Ile Lys Ile Thr
1 5 10 15
Asp Phe Gly Leu Cys Lys Glu Gly Ile Lys Asp Gly Ala Thr Met Lys
20 25 30
Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val
35 40 45

<210> 92
<211> 45
<212> PRT
<213> *Caenorhabditis elegans*

<400> 92
Lys Leu Glu Asn Leu Leu Leu Asp Lys Asp Gly His Ile Lys Ile Ala
1 5 10 15
Asp Phe Gly Leu Cys Lys Glu Glu Ile Ser Phe Gly Asp Lys Thr Ser
20 25 30
Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val
35 40 45

<210> 93
<211> 57
<212> PRT
<213> *Homo sapiens*

<400> 93
Phe Leu Thr Ala Leu Lys Tyr Ser Phe Gln Thr His Asp Arg Leu Cys
1 5 10 15
Phe Val Met Glu Tyr Ala Asn Gly Gly Glu Leu Phe Phe His Leu Ser

	20					25			30						
Arg	Glu	Arg	Val	Phe	Ser	Glu	Asp	Arg	Ala	Arg	Phe	Tyr	Gly	Ala	Glu
	35					40						45			
Ile	Val	Ser	Ala	Leu	Asp	Tyr	Leu	His							
	50					55									

<210> 94
 <211> 57
 <212> PRT
 <213> Caenorhabditis elegans

Tyr	Phe	Gln	Glu	Leu	Lys	Tyr	Ser	Phe	Gln	Glu	Gln	His	Tyr	Leu	Cys
1				5					10					15	
Phe	Val	Met	Gln	Phe	Ala	Asn	Gly	Gly	Glu	Leu	Phe	Thr	His	Val	Arg
		20					25						30		
Lys	Cys	Gly	Thr	Phe	Ser	Glu	Pro	Arg	Ala	Arg	Phe	Tyr	Gly	Ala	Glu
	35					40						45			
Ile	Val	Leu	Ala	Leu	Gly	Tyr	Leu	His							
	50					55									

<210> 95
 <211> 59
 <212> PRT
 <213> Homo sapiens

Asn	Asn	Phe	Ser	Val	Ala	Gln	Cys	Gln	Leu	Met	Lys	Thr	Glu	Arg	Pro
1				5					10					15	
Arg	Pro	Asn	Thr	Phe	Ile	Ile	Arg	Cys	Leu	Gln	Trp	Thr	Thr	Val	Ile
		20					25						30		
Glu	Arg	Thr	Phe	His	Val	Glu	Thr	Pro	Glu	Glu	Arg	Glu	Glu	Trp	Ala
	35					40						45			
Thr	Ala	Ile	Gln	Thr	Val	Ala	Asp	Gly	Leu	Lys					
	50					55									

<210> 96
 <211> 59
 <212> PRT
 <213> Caenorhabditis elegans

Ser	Thr	Phe	Ala	Ile	Phe	Tyr	Phe	Gln	Thr	Met	Leu	Phe	Glu	Lys	Pro
1				5					10					15	
Arg	Pro	Asn	Met	Phe	Met	Val	Arg	Cys	Leu	Gln	Trp	Thr	Thr	Val	Ile
		20					25						30		
Glu	Arg	Thr	Phe	Tyr	Ala	Glu	Ser	Ala	Glu	Val	Arg	Gln	Arg	Trp	Ile
	35					40						45			
His	Ala	Ile	Glu	Ser	Ile	Ser	Lys	Lys	Tyr	Lys					
	50					55									

<210> 97
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 97
 Leu Thr Ala Leu Lys Tyr Ser Phe Gln Thr His Asp Arg Leu Cys Phe
 1 5 10 15
 Val Met Glu Tyr Ala Asn Gly Gly Glu Leu Phe Phe His Leu Ser Arg
 20 25 30
 Glu

<210> 98
 <211> 33
 <212> PRT
 <213> Caenorhabditis elegans

<400> 98
 Leu Gln Glu Leu Lys Tyr Ser Phe Gln Thr Asn Asp Arg Leu Cys Phe
 1 5 10 15
 Val Met Glu Phe Ala Ile Gly Gly Asp Leu Tyr Tyr His Leu Asn Arg
 20 25 30
 Glu

<210> 99
 <211> 36
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 99
 Lys Leu Glu Asn Leu Leu Asp Lys Asp Gly His Ile Lys Ile Asp Phe
 1 5 10 15
 Gly Leu Cys Lys Glu Ile Gly Thr Phe Cys Gly Thr Pro Glu Tyr Leu
 20 25 30
 Ala Pro Glu Val
 35

<210> 100
 <211> 37
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 100
 Leu Lys Tyr Ser Phe Gln Leu Cys Phe Val Met Ala Asn Gly Gly Glu
 1 5 10 15
 Leu Phe His Phe Ser Glu Arg Ala Arg Phe Tyr Gly Ala Glu Ile Val
 20 25 30
 Ala Leu Tyr Leu His
 35

<210> 101
 <211> 29
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 101
 Phe Gln Met Glu Pro Arg Pro Asn Phe Arg Cys Leu Gln Trp Thr Thr
 1 5 10 15

Val Ile Glu Arg Thr Phe Glu Glu Arg Trp Ala Ile Lys
 20 25

<210> 102
 <211> 24
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 102
 Leu Leu Lys Tyr Ser Phe Gln Thr Asp Arg Leu Cys Phe Val Met Glu
 1 5 10 15
 Ala Gly Gly Leu His Leu Arg Glu
 20

<210> 103
 <211> 366
 <212> PRT
 <213> Homo sapiens

<400> 103
 Arg Gly Ala Ile Arg Ile Glu Lys Asn Ala Asp Leu Cys Tyr Leu Ser
 1 5 10 15
 Thr Val Asp Trp Ser Leu Ile Leu Asp Ala Val Ser Asn Asn Tyr Ile
 20 25 30
 Val Gly Asn Lys Pro Pro Lys Glu Cys Gly Asp Leu Cys Pro Gly Thr
 35 40 45
 Met Glu Glu Lys Pro Met Cys Glu Lys Thr Thr Ile Asn Asn Glu Tyr
 50 55 60
 Asn Tyr Arg Cys Trp Thr Asn Arg Cys Gln Lys Met Cys Pro Ser
 65 70 75 80
 Thr Cys Gly Lys Arg Ala Cys Thr Glu Asn Asn Glu Cys Cys His Pro
 85 90 95
 Glu Cys Leu Gly Ser Cys Ser Ala Pro Asp Asn Asp Thr Ala Cys Val
 100 105 110
 Ala Cys Arg His Tyr Tyr Tyr Ala Gly Val Cys Val Pro Ala Cys Pro
 115 120 125
 Pro Asn Thr Tyr Arg Phe Glu Gly Trp Arg Cys Val Asp Arg Asp Phe
 130 135 140
 Cys Ala Asn Ile Leu Ser Ala Glu Ser Ser Asp Ser Glu Gly Phe Val
 145 150 155 160
 Ile His Asp Gly Glu Cys Met Gln Glu Cys Pro Ser Gly Phe Ile Arg
 165 170 175
 Asn Gly Ser Gln Ser Met Tyr Cys Ile Pro Cys Glu Gly Pro Cys Pro
 180 185 190
 Lys Val Cys Glu Glu Glu Lys Lys Thr Lys Thr Ile Asp Ser Val Thr
 195 200 205
 Ser Ala Gln Met Leu Gln Gly Cys Thr Ile Phe Lys Gly Asn Leu Leu
 210 215 220
 Ile Asn Ile Arg Arg Gly Asn Asn Ile Ala Ser Glu Leu Glu Asn Phe
 225 230 235 240
 Met Gly Leu Ile Glu Val Val Thr Gly Tyr Val Lys Ile Arg His Ser
 245 250 255
 His Ala Leu Val Ser Leu Ser Phe Leu Lys Asn Leu Arg Leu Ile Leu
 260 265 270
 Gly Glu Glu Gln Leu Glu Gly Asn Tyr Ser Phe Tyr Val Leu Asp Asn
 275 280 285
 Gln Asn Leu Gln Gln Leu Trp Asp Trp Asp His Arg Asn Leu Thr Ile

290		295		300
Lys Ala Gly Lys Met Tyr Phe Ala Phe Asn Pro Lys Leu Cys Val Ser				
305		310		315
Glu Ile Tyr Arg Met Glu Glu Val Thr Gly Thr Lys Gly Arg Gln Ser				
	325		330	
Lys Gly Asp Ile Asn Thr Arg Asn Asn Gly Glu Arg Ala Ser Cys Glu				
	340		345	
Ser Asp Val Leu His Phe Thr Ser Thr Thr Thr Ser Lys Asn				
	355		360	
				365

<210> 104
 <211> 370
 <212> PRT
 <213> Homo sapiens

<400> 104

Arg Gly Ser Val Arg Ile Glu Lys Asn Asn Glu Leu Cys Tyr Leu Ala				
1	5	10		15
Thr Ile Asp Trp Ser Arg Ile Leu Asp Ser Val Glu Asp Asn Tyr Ile				
	20	25		30
Val Leu Asn Lys Asp Asp Asn Glu Glu Cys Gly Asp Ile Cys Pro Gly				
	35	40		45
Thr Ala Lys Gly Lys Thr Asn Cys Pro Ala Thr Val Ile Asn Gly Gln				
	50	55		60
Phe Val Glu Arg Cys Trp Thr His Ser His Cys Gln Lys Val Cys Pro				
65	70		75	80
Thr Ile Cys Lys Ser His Gly Cys Thr Ala Glu Gly Leu Cys Cys His				
	85	90		95
Ser Glu Cys Leu Gly Asn Cys Ser Gln Pro Asp Asp Pro Thr Lys Cys				
	100	105		110
Val Ala Cys Arg Asn Phe Tyr Leu Asp Gly Arg Cys Val Glu Thr Cys				
	115	120		125
Pro Pro Pro Tyr Tyr His Phe Gln Asp Trp Arg Cys Val Asn Phe Ser				
	130	135		140
Phe Cys Gln Asp Leu His His Lys Cys Lys Asn Ser Arg Arg Gln Gly				
145	150		155	160
Cys His Gln Tyr Val Ile His Asn Asn Lys Cys Ile Pro Glu Cys Pro				
	165	170		175
Ser Gly Tyr Thr Met Asn Ser Ser Asn Leu Leu Cys Thr Pro Cys Leu				
	180	185		190
Gly Pro Cys Pro Lys Val Cys His Leu Leu Glu Gly Glu Lys Thr Ile				
	195	200		205
Asp Ser Val Thr Ser Ala Gln Glu Leu Arg Gly Cys Thr Val Ile Asn				
	210	215		220
Gly Ser Leu Ile Ile Asn Ile Arg Gly Gly Asn Asn Leu Ala Ala Glu				
225	230		235	240
Leu Glu Ala Asn Leu Gly Leu Ile Glu Glu Ile Ser Gly Tyr Leu Lys				
	245	250		255
Ile Arg Arg Ser Tyr Ala Leu Val Ser Leu Ser Phe Phe Arg Lys Leu				
	260	265		270
Arg Leu Ile Arg Gly Glu Thr Leu Glu Ile Gly Asn Tyr Ser Phe Tyr				
	275	280		285
Ala Leu Asp Asn Gln Asn Leu Arg Gln Leu Trp Asp Trp Ser Lys His				
	290	295		300
Asn Leu Thr Ile Thr Gln Gly Lys Leu Phe Phe His Tyr Asn Pro Lys				
305	310		315	320
Leu Cys Leu Ser Glu Ile His Lys Met Glu Glu Val Ser Gly Thr Lys				
	325	330		335

Gly	Arg	Gln	Glu	Arg	Asn	Asp	Ile	Ala	Leu	Lys	Thr	Asn	Gly	Asp	Gln
			340					345					350		
Ala	Ser	Cys	Glu	Asn	Glu	Leu	Leu	Lys	Phe	Ser	Tyr	Ile	Arg	Thr	Ser
		355					360					365			
Phe	Asp														
	370														

<210> 105
 <211> 383
 <212> PRT
 <213> *Drosophila melanogaster*

<400> 105

Arg	Gly	Gly	Val	Arg	Ile	Glu	Lys	Asn	His	Lys	Leu	Cys	Tyr	Asp	Arg
1				5					10					15	
Thr	Ile	Asp	Trp	Leu	Glu	Ile	Leu	Ala	Glu	Asn	Glu	Ser	Gln	Leu	Val
			20					25					30		
Val	Leu	Thr	Glu	Asn	Gly	Lys	Glu	Lys	Glu	Cys	Ser	Leu	Ser	Lys	Cys
		35					40					45			
Pro	Gly	Glu	Ile	Arg	Ile	Glu	Gly	His	Asp	Asn	Thr	Ala	Ile	Glu	
	50					55				60					
Gly	Glu	Leu	Asn	Ala	Ser	Cys	Gln	Leu	His	Asn	Asn	Arg	Arg	Leu	Cys
65					70					75					80
Trp	Asn	Ser	Lys	Leu	Cys	Gln	Thr	Lys	Cys	Pro	Glu	Lys	Cys	Arg	Asn
				85					90					95	
Asn	Cys	Ile	Asp	Glu	His	Thr	Cys	Cys	Ser	Gln	Asp	Cys	Leu	Gly	Gly
			100					105					110		
Cys	Val	Ile	Asp	Lys	Asn	Gly	Asn	Glu	Ser	Cys	Ile	Ser	Cys	Arg	Asn
		115					120					125			
Val	Ser	Phe	Asn	Asn	Ile	Cys	Met	Asp	Ser	Cys	Pro	Lys	Gly	Tyr	Tyr
	130					135					140				
Gln	Phe	Asp	Ser	Arg	Cys	Val	Thr	Ala	Asn	Glu	Cys	Ile	Thr	Leu	Thr
145					150					155					160
Lys	Phe	Glu	Thr	Asn	Ser	Val	Tyr	Ser	Gly	Ile	Pro	Tyr	Asn	Gly	Gln
				165					170					175	
Cys	Ile	Thr	His	Cys	Pro	Thr	Gly	Tyr	Gln	Lys	Ser	Glu	Asn	Lys	Arg
			180					185					190		
Met	Cys	Glu	Pro	Cys	Pro	Gly	Gly	Lys	Cys	Asp	Lys	Glu	Cys	Ser	Ser
		195				200						205			
Gly	Leu	Ile	Asp	Ser	Leu	Glu	Arg	Ala	Arg	Glu	Phe	His	Gly	Cys	Thr
	210					215					220				
Ile	Ile	Thr	Gly	Thr	Glu	Pro	Leu	Thr	Ile	Ser	Ile	Lys	Arg	Glu	Ser
225					230					235					240
Gly	Ala	His	Val	Met	Asp	Glu	Leu	Lys	Tyr	Gly	Leu	Ala	Ala	Val	His
				245					250					255	
Lys	Ile	Gln	Ser	Ser	Leu	Met	Val	His	Leu	Thr	Tyr	Gly	Leu	Lys	Ser
			260					265					270		
Leu	Lys	Phe	Phe	Gln	Ser	Leu	Thr	Glu	Ile	Ser	Gly	Asp	Pro	Pro	Met
		275					280					285			
Asp	Ala	Asp	Lys	Tyr	Ala	Leu	Tyr	Val	Leu	Asp	Asn	Arg	Asp	Leu	Asp
	290					295					300				
Glu	Leu	Trp	Gly	Pro	Asn	Gln	Thr	Val	Phe	Ile	Arg	Lys	Gly	Gly	Val
305					310					315					320
Phe	Phe	His	Phe	Asn	Pro	Lys	Leu	Cys	Val	Ser	Thr	Ile	Asn	Gln	Leu
				325					330					335	
Leu	Pro	Met	Leu	Ala	Ser	Lys	Pro	Lys	Phe	Phe	Glu	Lys	Ser	Asp	Glu
			340					345					350		
Gly	Ala	Asp	Ser	Asn	Gly	Asn	Arg	Gly	Ser	Cys	Gly	Thr	Ala	Val	Leu

		355					360				365						
Asn	Val	Thr	Leu	Gln	Ser	Val	Gly	Ala	Asn	Ser	Ala	Ser	Leu	Asn			
		370					375					380					

<210> 106
 <211> 381
 <212> PRT
 <213> Caenorhabditis elegans

<400> 106

Asn	Gly	Gly	Val	Arg	Ile	Ile	Asp	Asn	Arg	Lys	Leu	Cys	Tyr	Thr	Lys		
1				5					10					15			
Thr	Ile	Asp	Trp	Lys	His	Leu	Ile	Thr	Ser	Ser	Ile	Asn	Asp	Val	Val		
		20						25					30				
Val	Asp	Asn	Ala	Ala	Glu	Tyr	Ala	Val	Thr	Glu	Thr	Gly	Leu	Met	Cys		
		35					40					45					
Pro	Arg	Gly	Ala	Cys	Glu	Glu	Asp	Lys	Gly	Glu	Ser	Lys	Cys	His	Tyr		
	50					55					60						
Leu	Glu	Glu	Lys	Asn	Gln	Glu	Gln	Gly	Val	Glu	Arg	Val	Gln	Ser	Cys		
65					70				75					80			
Trp	Ser	Asn	Thr	Thr	Cys	Gln	Lys	Ser	Cys	Ala	Tyr	Asp	Arg	Leu	Leu		
			85						90					95			
Pro	Thr	Lys	Glu	Ile	Gly	Pro	Gly	Cys	Asp	Ala	Asn	Gly	Asp	Arg	Cys		
		100						105					110				
His	Asp	Gln	Cys	Val	Gly	Gly	Cys	Glu	Arg	Val	Asn	Asp	Ala	Thr	Ala		
		115					120					125					
Cys	His	Ala	Cys	Lys	Asn	Val	Tyr	His	Lys	Gly	Lys	Cys	Ile	Glu	Lys		
	130					135					140						
Cys	Asp	Ala	His	Leu	Tyr	Leu	Leu	Leu	Gln	Arg	Arg	Cys	Val	Thr	Arg		
145					150				155						160		
Glu	Gln	Cys	Leu	Gln	Leu	Asn	Pro	Val	Leu	Ser	Asn	Lys	Thr	Val	Pro		
			165					170						175			
Ile	Lys	Ala	Thr	Ala	Gly	Leu	Cys	Ser	Asp	Lys	Cys	Pro	Asp	Gly	Tyr		
		180						185					190				
Gln	Ile	Asn	Pro	Asp	Asp	His	Arg	Glu	Cys	Arg	Lys	Cys	Val	Gly	Lys		
		195					200					205					
Cys	Glu	Ile	Val	Cys	Glu	Ile	Asn	His	Val	Ile	Asp	Thr	Phe	Pro	Lys		
	210					215					220						
Ala	Gln	Ala	Ile	Arg	Leu	Cys	Asn	Ile	Ile	Asp	Gly	Asn	Leu	Thr	Ile		
225					230					235					240		
Glu	Ile	Arg	Gly	Lys	Gln	Asp	Ser	Gly	Met	Ala	Ser	Glu	Leu	Lys	Asp		
			245					250						255			
Ile	Phe	Ala	Asn	Ile	His	Thr	Ile	Thr	Gly	Tyr	Leu	Leu	Val	Arg	Gln		
		260						265					270				
Ser	Ser	Pro	Phe	Ile	Ser	Leu	Asn	Met	Phe	Arg	Asn	Leu	Arg	Arg	Ile		
		275					280					285					
Glu	Ala	Lys	Ser	Leu	Phe	Arg	Asn	Leu	Tyr	Ala	Ile	Thr	Val	Phe	Glu		
	290					295					300						
Asn	Pro	Asn	Leu	Lys	Lys	Leu	Phe	Asp	Ser	Thr	Thr	Asp	Leu	Thr	Leu		
305					310					315					320		
Asp	Arg	Gly	Thr	Val	Ser	Ile	Ala	Asn	Asn	Lys	Met	Leu	Cys	Phe	Lys		
			325					330						335			
Tyr	Ile	Lys	Gln	Leu	Met	Ser	Lys	Leu	Asn	Ile	Pro	Leu	Asp	Pro	Ile		
		340						345					350				
Asp	Gln	Ser	Glu	Gly	Thr	Asn	Gly	Glu	Lys	Ala	Ile	Cys	Glu	Asp	Met		
	355					360						365					
Ala	Ile	Asn	Val	Ser	Ile	Thr	Ala	Val	Asn	Ala	Asp	Ser					
	370					375						380					

<210> 107
 <211> 370
 <212> PRT
 <213> Homo sapiens

<400> 107
 Ala Leu Pro Val Ala Val Leu Leu Ile Val Gly Gly Leu Val Ile Met
 1 5 10 15
 Leu Tyr Val Phe His Arg Lys Arg Asn Asn Ser Arg Leu Gly Asn Gly
 20 25 30
 Val Leu Tyr Ala Ser Val Asn Pro Glu Tyr Phe Ser Ala Ala Asp Val
 35 40 45
 Tyr Val Pro Asp Glu Trp Glu Val Ala Arg Glu Lys Ile Thr Met Ser
 50 55 60
 Arg Glu Leu Gly Gln Gly Ser Phe Gly Met Val Tyr Glu Gly Val Ala
 65 70 75 80
 Lys Gly Val Val Lys Asp Glu Pro Glu Thr Arg Val Ala Ile Lys Thr
 85 90 95
 Val Asn Glu Ala Ala Ser Met Arg Glu Arg Ile Glu Phe Leu Asn Glu
 100 105 110
 Ala Ser Val Met Lys Glu Phe Asn Cys His His Val Val Arg Leu Leu
 115 120 125
 Gly Val Val Ser Gln Gly Gln Pro Thr Leu Val Ile Met Glu Leu Met
 130 135 140
 Thr Arg Gly Asp Leu Lys Ser Tyr Leu Arg Ser Leu Arg Pro Glu Met
 145 150 155 160
 Glu Asn Asn Pro Val Leu Ala Pro Pro Ser Leu Ser Lys Met Ile Gln
 165 170 175
 Met Ala Gly Glu Ile Ala Asp Gly Met Ala Tyr Leu Asn Ala Asn Lys
 180 185 190
 Phe Val His Arg Asp Leu Ala Ala Arg Asn Cys Met Val Ala Glu Asp
 195 200 205
 Phe Thr Val Lys Ile Gly Asp Phe Gly Met Thr Arg Asp Ile Tyr Glu
 210 215 220
 Thr Asp Tyr Tyr Arg Lys Gly Gly Lys Gly Leu Leu Pro Val Arg Trp
 225 230 235 240
 Met Ser Pro Glu Ser Leu Lys Asp Gly Val Phe Thr Thr Tyr Ser Asp
 245 250 255
 Val Trp Ser Phe Gly Val Val Leu Trp Glu Ile Ala Thr Leu Ala Glu
 260 265 270
 Gln Pro Tyr Gln Gly Leu Ser Asn Glu Gln Val Leu Arg Phe Val Met
 275 280 285
 Glu Gly Gly Leu Leu Asp Lys Pro Asp Asn Cys Pro Asp Met Leu Phe
 290 295 300
 Glu Leu Met Arg Met Cys Trp Gln Tyr Asn Pro Lys Met Arg Pro Ser
 305 310 315 320
 Phe Leu Glu Ile Ile Ser Ser Ile Lys Glu Glu Met Glu Pro Gly Phe
 325 330 335
 Arg Glu Val Ser Phe Tyr Tyr Ser Glu Glu Asn Lys Leu Pro Glu Pro
 340 345 350
 Glu Glu Leu Asp Leu Glu Pro Glu Asn Met Glu Ser Val Pro Leu Asp
 355 360 365
 Pro Ser
 370

<210> 108
 <211> 374

<212> PRT
 <213> Homo sapiens

<400> 108

Ile	Gly	Pro	Leu	Ile	Phe	Val	Phe	Leu	Phe	Ser	Val	Val	Ile	Gly	Ser		
1				5					10					15			
Ile	Tyr	Leu	Phe	Leu	Arg	Lys	Arg	Gln	Pro	Asp	Gly	Pro	Leu	Gly	Pro		
			20					25					30				
Leu	Tyr	Ala	Ser	Ser	Asn	Pro	Glu	Tyr	Leu	Ser	Ala	Ser	Asp	Val	Phe		
		35					40					45					
Pro	Cys	Ser	Val	Tyr	Val	Pro	Asp	Glu	Trp	Glu	Val	Ser	Arg	Glu	Lys		
	50					55					60						
Ile	Thr	Leu	Leu	Arg	Glu	Leu	Gly	Gln	Gly	Ser	Phe	Gly	Met	Val	Tyr		
65				70					75					80			
Glu	Gly	Asn	Ala	Arg	Asp	Ile	Ile	Lys	Gly	Glu	Ala	Glu	Thr	Arg	Val		
			85					90					95				
Ala	Val	Lys	Thr	Val	Asn	Glu	Ser	Ala	Ser	Leu	Arg	Glu	Arg	Ile	Glu		
			100					105					110				
Phe	Leu	Asn	Glu	Ala	Ser	Val	Met	Lys	Gly	Phe	Thr	Cys	His	His	Val		
		115					120					125					
Val	Arg	Leu	Leu	Gly	Val	Val	Ser	Lys	Gly	Gln	Pro	Thr	Leu	Val	Val		
	130				135						140						
Met	Glu	Leu	Met	Ala	His	Gly	Asp	Leu	Lys	Ser	Tyr	Leu	Arg	Ser	Leu		
145				150					155						160		
Arg	Pro	Glu	Ala	Glu	Asn	Asn	Pro	Gly	Arg	Pro	Pro	Pro	Thr	Leu	Gln		
			165					170						175			
Glu	Met	Ile	Gln	Met	Ala	Ala	Glu	Ile	Ala	Asp	Gly	Met	Ala	Tyr	Leu		
		180					185					190					
Asn	Ala	Lys	Lys	Phe	Val	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Cys	Met		
	195					200						205					
Val	Ala	His	Asp	Phe	Thr	Val	Lys	Ile	Gly	Asp	Phe	Gly	Met	Thr	Arg		
	210				215						220						
Asp	Ile	Tyr	Glu	Thr	Asp	Tyr	Tyr	Arg	Lys	Gly	Gly	Lys	Gly	Leu	Leu		
225				230					235					240			
Pro	Val	Arg	Trp	Met	Ala	Pro	Glu	Ser	Leu	Lys	Asp	Gly	Val	Phe	Thr		
			245					250						255			
Thr	Ser	Ser	Asp	Met	Trp	Ser	Phe	Gly	Val	Val	Leu	Trp	Glu	Ile	Thr		
		260					265						270				
Ser	Leu	Ala	Glu	Gln	Pro	Tyr	Gln	Gly	Leu	Ser	Asn	Glu	Gln	Val	Leu		
	275					280						285					
Lys	Phe	Val	Met	Asp	Gly	Gly	Tyr	Leu	Asp	Gln	Pro	Asp	Asn	Cys	Pro		
	290				295						300						
Glu	Arg	Val	Thr	Asp	Leu	Met	Arg	Met	Cys	Trp	Gln	Phe	Asn	Pro	Lys		
305				310					315					320			
Met	Arg	Pro	Thr	Phe	Leu	Glu	Ile	Val	Asn	Leu	Leu	Lys	Asp	Asp	Leu		
			325					330					335				
His	Pro	Ser	Phe	Pro	Glu	Val	Ser	Phe	Phe	His	Ser	Glu	Glu	Asn	Lys		
		340					345					350					
Ala	Pro	Glu	Ser	Glu	Glu	Leu	Glu	Met	Glu	Phe	Glu	Asp	Met	Glu	Asn		
	355					360						365					
Val	Pro	Leu	Asp	Arg	Ser												
	370																

<210> 109
 <211> 384
 <212> PRT
 <213> Drosophila melanogaster

<400> 109

Gly	Ile	Gly	Leu	Ala	Phe	Leu	Ile	Val	Ser	Leu	Phe	Gly	Tyr	Val	Cys
1				5					10					15	
Tyr	Leu	His	Lys	Arg	Lys	Val	Pro	Ser	Asn	Asp	Leu	His	Met	Asn	Thr
			20					25					30		
Glu	Val	Asn	Pro	Phe	Tyr	Ala	Ser	Met	Gln	Tyr	Ile	Pro	Asp	Asp	Trp
		35					40					45			
Glu	Val	Leu	Arg	Glu	Asn	Ile	Ile	Gln	Leu	Ala	Pro	Leu	Gly	Gln	Gly
	50					55					60				
Ser	Phe	Gly	Met	Val	Tyr	Glu	Gly	Ile	Leu	Lys	Ser	Phe	Pro	Pro	Asn
65					70					75					80
Gly	Val	Asp	Arg	Glu	Cys	Ala	Ile	Lys	Thr	Val	Asn	Glu	Asn	Ala	Thr
				85					90					95	
Asp	Arg	Glu	Arg	Thr	Asn	Phe	Leu	Ser	Glu	Ala	Ser	Val	Met	Lys	Glu
			100					105					110		
Phe	Asp	Thr	Tyr	His	Val	Val	Arg	Leu	Leu	Gly	Val	Cys	Ser	Arg	Gly
		115					120					125			
Gln	Pro	Ala	Leu	Val	Val	Met	Glu	Leu	Met	Lys	Lys	Gly	Asp	Leu	Lys
	130					135					140				
Ser	Tyr	Leu	Arg	Ala	His	Arg	Pro	Glu	Glu	Arg	Asp	Glu	Ala	Met	Met
145					150					155					160
Thr	Tyr	Leu	Asn	Arg	Ile	Gly	Val	Thr	Gly	Asn	Val	Gln	Pro	Pro	Thr
			165						170					175	
Tyr	Gly	Arg	Ile	Tyr	Gln	Met	Ala	Ile	Glu	Ile	Ala	Asp	Gly	Met	Ala
		180						185					190		
Tyr	Leu	Ala	Ala	Lys	Lys	Phe	Val	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn
	195						200					205			
Cys	Met	Val	Ala	Asp	Asp	Leu	Thr	Val	Lys	Ile	Gly	Asp	Phe	Gly	Met
	210					215					220				
Thr	Arg	Asp	Ile	Tyr	Glu	Thr	Asp	Tyr	Tyr	Arg	Lys	Gly	Thr	Lys	Gly
225					230					235					240
Leu	Leu	Pro	Val	Arg	Trp	Met	Pro	Pro	Glu	Ser	Leu	Arg	Asp	Gly	Val
			245						250					255	
Tyr	Ser	Ser	Ala	Ser	Asp	Val	Phe	Ser	Phe	Gly	Val	Val	Leu	Trp	Glu
			260					265					270		
Met	Ala	Thr	Leu	Ala	Ala	Gln	Pro	Tyr	Gln	Gly	Leu	Ser	Asn	Glu	Gln
		275					280					285			
Val	Leu	Arg	Tyr	Val	Ile	Asp	Gly	Gly	Val	Met	Glu	Arg	Pro	Glu	Asn
	290					295					300				
Cys	Pro	Asp	Phe	Leu	His	Lys	Leu	Met	Gln	Arg	Cys	Trp	His	His	Arg
305					310					315					320
Ser	Ser	Ala	Arg	Pro	Ser	Phe	Leu	Asp	Ile	Ile	Ala	Tyr	Leu	Glu	Pro
			325						330					335	
Gln	Cys	Pro	Asn	Ser	Gln	Phe	Lys	Glu	Val	Ser	Phe	Tyr	His	Ser	Glu
			340					345					350		
Ala	Gly	Leu	Gln	His	Arg	Glu	Lys	Glu	Arg	Lys	Glu	Arg	Asn	Gln	Leu
		355					360					365			
Asp	Ala	Phe	Ala	Ala	Val	Pro	Leu	Asp	Gln	Asp	Leu	Gln	Asp	Arg	Glu
	370					375					380				

<210> 110

<211> 380

<212> PRT

<213> Caenorhabditis elegans

<400> 110

Gly	Met	Leu	Leu	Val	Phe	Leu	Ile	Leu	Met	Ser	Ile	Ala	Gly	Cys	Ile
1				5					10					15	

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Ile Tyr Tyr Tyr Ile Gln Val Arg Tyr Gly Lys Lys Val Lys Ala Leu
    20          25          30
Ser Asp Phe Met Gln Leu Asn Pro Glu Tyr Cys Val Asp Asn Lys Tyr
    35          40          45
Asn Ala Asp Asp Trp Glu Leu Arg Gln Asp Asp Val Val Leu Gly Gln
    50          55          60
Gln Cys Gly Glu Gly Ser Phe Gly Lys Val Tyr Leu Gly Thr Gly Asn
    65          70          75          80
Asn Val Val Ser Leu Met Gly Asp Arg Phe Gly Pro Cys Ala Ile Lys
    85          90          95
Ile Asn Val Asp Asp Pro Ala Ser Thr Glu Asn Leu Asn Tyr Leu Met
    100         105         110
Glu Ala Asn Ile Met Lys Asn Phe Lys Thr Asn Phe Ile Val Gln Leu
    115         120         125
Tyr Gly Val Ile Ser Thr Val Gln Pro Ala Met Val Val Met Glu Met
    130         135         140
Met Asp Leu Gly Asn Leu Arg Asp Tyr Leu Arg Ser Lys Arg Glu Asp
    145         150         155         160
Glu Val Phe Asn Glu Thr Asp Cys Asn Phe Phe Asp Ile Ile Pro Arg
    165         170         175
Asp Lys Phe His Glu Trp Ala Ala Gln Ile Cys Asp Gly Met Ala Tyr
    180         185         190
Leu Glu Ser Leu Lys Phe Cys His Arg Asp Leu Ala Ala Arg Asn Cys
    195         200         205
Met Ile Asn Arg Asp Glu Thr Val Lys Ile Gly Asp Phe Gly Met Ala
    210         215         220
Arg Asp Leu Phe Tyr His Asp Tyr Tyr Lys Pro Ser Gly Lys Arg Met
    225         230         235         240
Met Pro Val Arg Trp Met Ser Pro Glu Ser Leu Lys Asp Gly Lys Phe
    245         250         255
Asp Ser Lys Ser Asp Val Trp Ser Phe Gly Val Val Leu Tyr Glu Met
    260         265         270
Val Thr Leu Gly Ala Gln Pro Tyr Ile Gly Leu Ser Asn Asp Glu Val
    275         280         285
Leu Asn Tyr Ile Gly Met Ala Arg Lys Val Ile Lys Lys Pro Glu Cys
    290         295         300
Cys Glu Asn Tyr Trp Tyr Lys Val Met Lys Met Cys Trp Arg Tyr Ser
    305         310         315         320
Pro Arg Asp Arg Pro Thr Phe Leu Gln Leu Val His Leu Leu Ala Ala
    325         330         335
Glu Ala Ser Pro Glu Phe Arg Asp Leu Ser Phe Val Leu Thr Asp Asn
    340         345         350
Gln Met Ile Leu Asp Asp Ser Glu Ala Leu Asp Leu Asp Asp Ile Asp
    355         360         365
Asp Thr Asp Met Asn Asp Gln Val Val Glu Val Ala
    370         375         380

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<210> 111
<211> 103
<212> PRT
<213> Caenorhabditis elegans

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<400> 111
Asn Ile Asp Arg Glu Phe Asp Gln Lys Ala Cys Glu Ser Leu Val Lys
  1         5         10         15
Lys Leu Lys Asp Lys Lys Asn Asp Leu Gln Asn Leu Ile Asp Val Val
    20         25         30
Leu Ser Lys Gly Thr Lys Tyr Thr Gly Cys Ile Thr Ile Pro Arg Thr

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	35					40				45									
Leu	Asp	Gly	Arg	Leu	Gln	Val	His	Gly	Arg	Lys	Gly	Phe	Pro	His	Val				
50						55					60								
Val	Tyr	Gly	Lys	Leu	Trp	Arg	Phe	Asn	Glu	Met	Thr	Lys	Asn	Glu	Thr				
65					70					75					80				
Arg	His	Val	Asp	His	Cys	Lys	His	Ala	Phe	Glu	Met	Lys	Ser	Asp	Met				
				85					90					95					
Val	Cys	Val	Asn	Pro	Tyr	His													
				100															

<210> 112
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 112																			
Gly	Gly	Glu	Ser	Glu	Thr	Phe	Ala	Lys	Arg	Ala	Ile	Glu	Ser	Leu	Val				
1				5					10					15					
Lys	Lys	Leu	Lys	Glu	Lys	Lys	Asp	Glu	Leu	Asp	Ser	Leu	Ile	Thr	Ala				
		20						25					30						
Ile	Thr	Thr	Asn	Gly	Ala	His	Pro	Ser	Lys	Cys	Val	Thr	Ile	Gln	Arg				
		35					40					45							
Thr	Leu	Asp	Gly	Arg	Leu	Gln	Val	Ala	Gly	Arg	Lys	Gly	Phe	Pro	His				
	50					55					60								
Val	Ile	Tyr	Ala	Arg	Leu	Trp	Arg	Trp	Pro	Asp	Leu	His	Lys	Asn	Glu				
65					70					75					80				
Leu	Lys	His	Val	Lys	Tyr	Cys	Gln	Tyr	Ala	Phe	Asp	Leu	Lys	Cys	Asp				
				85					90					95					
Ser	Val	Cys	Val	Asn	Pro	Tyr	His												
				100															

<210> 113
 <211> 205
 <212> PRT
 <213> Caenorhabditis elegans

<400> 113																			
Ile	Val	Tyr	Tyr	Glu	Lys	Asn	Leu	Gln	Ile	Gly	Glu	Lys	Lys	Cys	Ser				
1				5					10					15					
Arg	Gly	Asn	Phe	His	Val	Asp	Gly	Gly	Phe	Ile	Cys	Ser	Glu	Asn	Arg				
		20						25					30						
Tyr	Ser	Leu	Gly	Leu	Glu	Pro	Asn	Pro	Ile	Arg	Glu	Pro	Val	Ala	Phe				
		35					40					45							
Lys	Val	Arg	Lys	Ala	Ile	Val	Asp	Gly	Ile	Arg	Phe	Ser	Tyr	Lys	Lys				
	50					55					60								
Asp	Gly	Ser	Val	Trp	Leu	Gln	Asn	Arg	Met	Lys	Tyr	Pro	Val	Phe	Val				
65					70					75					80				
Thr	Ser	Gly	Tyr	Leu	Asp	Glu	Gln	Ser	Gly	Gly	Leu	Lys	Lys	Asp	Lys				
				85					90					95					
Val	His	Lys	Val	Tyr	Gly	Cys	Ala	Ser	Ile	Lys	Thr	Phe	Gly	Phe	Asn				
			100					105					110						
Val	Ser	Lys	Gln	Ile	Ile	Arg	Asp	Ala	Leu	Leu	Ser	Lys	Gln	Met	Ala				
		115					120					125							
Thr	Met	Tyr	Leu	Gln	Gly	Lys	Leu	Thr	Pro	Met	Asn	Tyr	Ile	Tyr	Glu				
	130					135					140								
Lys	Lys	Thr	Gln	Glu	Glu	Leu	Arg	Arg	Glu	Ala	Thr	Arg	Thr	Thr	Asp				
145					150					155					160				

Ser	Leu	Ala	Lys	Tyr	Cys	Cys	Val	Arg	Val	Ser	Phe	Cys	Lys	Gly	Phe
				165					170					175	
Gly	Glu	Ala	Tyr	Pro	Glu	Arg	Pro	Ser	Ile	His	Asp	Cys	Pro	Val	Trp
			180					185					190		
Ile	Glu	Leu	Lys	Ile	Asn	Ile	Ala	Tyr	Asp	Phe	Met	Asp			
		195					200					205			

<210> 114
 <211> 212
 <212> PRT
 <213> Homo sapiens

<400> 114

Ile	Ala	Tyr	Phe	Glu	Met	Asp	Val	Gln	Val	Gly	Glu	Thr	Phe	Lys	Val
1				5					10					15	
Pro	Ser	Ser	Cys	Pro	Ile	Val	Thr	Val	Asp	Gly	Tyr	Val	Asp	Pro	Ser
			20					25					30		
Gly	Gly	Asp	Arg	Phe	Cys	Leu	Gly	Gln	Leu	Ser	Asn	Val	His	Arg	Thr
		35					40					45			
Glu	Ala	Ile	Glu	Arg	Ala	Arg	Leu	His	Ile	Gly	Lys	Gly	Val	Gln	Leu
	50					55					60				
Glu	Cys	Lys	Gly	Glu	Gly	Asp	Val	Trp	Val	Arg	Cys	Leu	Ser	Asp	His
65					70					75				80	
Ala	Val	Phe	Val	Gln	Ser	Tyr	Tyr	Leu	Asp	Arg	Glu	Ala	Gly	Arg	Ala
				85					90					95	
Pro	Gly	Asp	Ala	Val	His	Lys	Ile	Tyr	Pro	Ser	Ala	Tyr	Ile	Lys	Val
			100					105					110		
Phe	Asp	Leu	Arg	Gln	Cys	His	Arg	Gln	Met	Gln	Gln	Gln	Ala	Ala	Thr
		115					120					125			
Ala	Gln	Ala	Ala	Ala	Ala	Ala	Gln	Ala	Ala	Ala	Val	Ala	Gly	Asn	Ile
	130					135					140				
Pro	Gly	Pro	Gly	Ser	Val	Gly	Gly	Ile	Ala	Pro	Ala	Ile	Ser	Leu	Ser
145					150					155				160	
Ala	Ala	Ala	Gly	Ile	Gly	Val	Asp	Asp	Leu	Arg	Arg	Leu	Cys	Ile	Leu
				165					170					175	
Arg	Met	Ser	Phe	Val	Lys	Gly	Trp	Gly	Pro	Asp	Tyr	Pro	Arg	Gln	Ser
			180					185					190		
Ile	Lys	Glu	Thr	Pro	Cys	Trp	Ile	Glu	Ile	His	Leu	His	Arg	Ala	Leu
		195					200					205			
Gln	Leu	Leu	Asp												
			210												

<210> 115
 <211> 50
 <212> PRT
 <213> Caenorhabditis elegans

<220>
 <221> VARIANT
 <222> (1)...(50)
 <223> Xaa = Any Amino Acid

<400> 115

Leu	Cys	Gly	Xaa	Xaa	Leu	Val	Glu	Ala	Leu	Xaa	Xaa	Val	Cys	Gly	Xaa
1				5					10					15	
Arg	Gly	Phe	Phe	Tyr	Thr	Pro	Lys	Thr	Arg	Arg	Lys	Arg	Gly	Ile	Val
			20					25					30		

Glu Gln Cys Cys Xaa Xaa Xaa Cys Xaa Xaa Xaa Gln Leu Glu Xaa Tyr
 35 40 45
 Cys Asn
 50

<210> 116
 <211> 39
 <212> PRT
 <213> Caenorhabditis elegans

<400> 116
 Leu Cys Gly Arg His Leu Ala Asp Ala Leu Tyr Phe Val Cys Gly Asn
 1 5 10 15
 Arg Gly Phe Gly Ile Val Glu Glu Cys Cys His Asn Pro Cys Thr Leu
 20 25 30
 Tyr Gln Leu Glu Asn Tyr Cys
 35

<210> 117
 <211> 112
 <212> PRT
 <213> Caenorhabditis elegans

<400> 117
 Met Asn Ser Val Phe Thr Ile Ile Phe Val Leu Cys Ala Leu Gln Val
 1 5 10 15
 Ala Ala Ser Phe Arg Gln Ser Phe Gly Pro Ser Met Ser Glu Glu Ser
 20 25 30
 Ala Ser Met Gln Leu Leu Arg Glu Leu Gln His Asn Met Met Glu Ser
 35 40 45
 Ala His Arg Pro Met Pro Arg Ala Arg Arg Val Pro Ala Pro Gly Glu
 50 55 60
 Thr Arg Ala Cys Gly Arg Lys Leu Ile Ser Leu Val Met Ala Val Cys
 65 70 75 80
 Gly Asp Leu Cys Asn Pro Gln Glu Gly Lys Asp Ile Ala Thr Glu Cys
 85 90 95
 Cys Gly Asn Gln Cys Ser Asp Asp Tyr Ile Arg Ser Ala Cys Cys Pro
 100 105 110

<210> 118
 <211> 106
 <212> PRT
 <213> Caenorhabditis elegans

<400> 118
 Met Phe Ser Phe Phe Thr Tyr Phe Leu Leu Ser Ala Leu Leu Leu Ser
 1 5 10 15
 Ala Ser Cys Arg Gln Pro Ser Met Asp Thr Ser Lys Ala Asp Arg Ile
 20 25 30
 Leu Arg Glu Ile Glu Met Glu Thr Glu Leu Glu Asn Gln Leu Ser Arg
 35 40 45
 Ala Arg Arg Val Pro Ala Gly Glu Val Arg Ala Cys Gly Arg Arg Leu
 50 55 60
 Leu Leu Phe Val Trp Ser Thr Cys Gly Glu Pro Cys Thr Pro Gln Glu
 65 70 75 80
 Asp Met Asp Ile Ala Thr Val Cys Cys Thr Thr Gln Cys Thr Pro Ser

		85		90		95
Tyr	Ile	Lys	Gln	Ala	Cys	Cys
		100		Pro	Glu	Lys
					105	

<210> 119
 <211> 105
 <212> PRT
 <213> Caenorhabditis elegans

<400> 119
 Met Pro Pro Ile Ile Leu Val Phe Phe Leu Val Leu Ile Pro Ala Ser
 1 5 10 15
 Gln Gln Tyr Pro Phe Ser Leu Glu Ser Leu Asn Asp Gln Ile Ile Asn
 20 25 30
 Glu Glu Val Ile Glu Tyr Met Leu Glu Asn Ser Ile Arg Ser Ser Arg
 35 40 45
 Thr Arg Arg Val Pro Asp Glu Lys Lys Ile Tyr Arg Cys Gly Arg Arg
 50 55 60
 Ile His Ser Tyr Val Phe Ala Val Cys Gly Lys Ala Cys Glu Ser Asn
 65 70 75 80
 Thr Glu Val Asn Ile Ala Ser Lys Cys Cys Arg Glu Glu Cys Thr Asp
 85 90 95
 Asp Phe Ile Arg Lys Gln Cys Cys Pro
 100 105

<210> 120
 <211> 118
 <212> PRT
 <213> Caenorhabditis elegans

<400> 120
 Met Ile Val Thr Leu Ile Val Phe Leu Val Ile Gly Leu Gln Met Ala
 1 5 10 15
 His Leu Ser Gln Val Ser Gly Asn Asn Glu Asn Gly Phe Leu Asn Pro
 20 25 30
 Phe Asp Leu Ser Gln Trp Ser Glu Glu Ile Leu His Arg Gln Tyr His
 35 40 45
 His His His His His His Gly Asn Arg Ala Arg Arg Thr Leu Glu
 50 55 60
 Thr Glu Lys Ile Tyr Arg Cys Gly Arg Lys Leu Tyr Thr Asp Val Leu
 65 70 75 80
 Ser Ala Cys Asn Gly Pro Cys Glu Pro Gly Thr Glu Gln Asp Leu Ser
 85 90 95
 Lys Leu Cys Cys Gly Asn Gln Cys Thr Phe Val Glu Ile Arg Lys Ala
 100 105 110
 Cys Cys Ala Asp Lys Leu
 115

<210> 121
 <211> 106
 <212> PRT
 <213> Caenorhabditis elegans

<400> 121
 Met Asn Ala Ile Ile Phe Cys Leu Leu Phe Thr Thr Val Thr Ala Thr
 1 5 10 15

Tyr	Glu	Val	Phe	Gly	Lys	Gly	Ile	Glu	His	Arg	Asn	Glu	His	Leu	Ile
			20					25					30		
Ile	Asn	Gln	Leu	Asp	Ile	Ile	Pro	Val	Glu	Ser	Thr	Pro	Thr	Pro	Asn
		35					40					45			
Arg	Ala	Ser	Arg	Val	Gln	Lys	Arg	Leu	Cys	Gly	Arg	Arg	Leu	Ile	Leu
	50					55					60				
Phe	Met	Leu	Ala	Thr	Cys	Gly	Glu	Cys	Asp	Thr	Asp	Ser	Ser	Glu	Asp
65					70					75					80
Leu	Ser	His	Ile	Cys	Cys	Ile	Lys	Gln	Cys	Asp	Val	Gln	Asp	Ile	Ile
				85					90					95	
Arg	Val	Cys	Cys	Pro	Asn	Ser	Phe	Arg	Lys						
			100					105							

<210> 122
 <211> 107
 <212> PRT
 <213> Caenorhabditis elegans

Met	Lys	Leu	Ser	Val	Val	Leu	Ala	Leu	Phe	Ile	Ile	Phe	Gln	Leu	Gly
1				5					10					15	
Ala	Ala	Ser	Leu	Met	Arg	Asn	Trp	Met	Phe	Asp	Phe	Glu	Lys	Glu	Leu
			20					25					30		
Glu	His	Asp	Tyr	Asp	Asp	Ser	Glu	Ile	Gly	Phe	His	Asn	Ile	His	Ser
		35					40					45			
Leu	Met	Ala	Arg	Ser	Arg	Arg	Gly	Asp	Lys	Val	Lys	Ile	Cys	Gly	Thr
	50					55					60				
Lys	Val	Leu	Lys	Met	Val	Met	Val	Met	Cys	Gly	Gly	Glu	Cys	Ser	Ser
65					70					75					80
Thr	Asn	Glu	Asn	Ile	Ala	Thr	Glu	Cys	Cys	Glu	Lys	Met	Cys	Thr	Met
				85					90					95	
Glu	Asp	Ile	Thr	Thr	Lys	Cys	Cys	Pro	Ser	Arg					
			100					105							

<210> 123
 <211> 73
 <212> PRT
 <213> Caenorhabditis elegans

Met	Lys	Leu	Leu	His	Ile	Phe	Ile	Ile	Phe	Leu	Leu	Phe	Gln	Ser	Cys
1				5					10					15	
Ser	Asn	Lys	Met	Cys	Gln	Tyr	Ser	Lys	Lys	Lys	Tyr	Lys	Ile	Cys	Gly
			20					25					30		
Val	Arg	Ala	Leu	Lys	His	Met	Lys	Val	Tyr	Cys	Thr	Arg	Gly	Met	Thr
		35					40					45			
Arg	Asp	Tyr	Gly	Lys	Leu	Leu	Val	Thr	Cys	Cys	Ser	Lys	Gly	Cys	Asn
	50					55					60				
Ala	Ile	Asp	Ile	Gln	Arg	Ile	Cys	Leu							
65						70									

<210> 124
 <211> 109
 <212> PRT
 <213> Caenorhabditis elegans

<400> 124
Met Tyr Trp Phe Arg Gln Val Tyr Arg Pro Ser Phe Phe Phe Gly Phe
1 5 10 15
Leu Ala Ile Leu Leu Leu Ser Ser Pro Thr Pro Ser Asp Ala Ser Ile
20 25 30
Arg Leu Cys Gly Ser Arg Leu Thr Thr Leu Leu Ala Val Cys Arg
35 40 45
Asn Gln Leu Cys Thr Gly Leu Thr Ala Phe Lys Arg Ser Ala Asp Gln
50 55 60
Ser Tyr Ala Pro Thr Thr Arg Asp Leu Phe His Ile His His Gln Gln
65 70 75 80
Lys Arg Gly Gly Ile Ala Thr Glu Cys Cys Glu Lys Arg Cys Ser Phe
85 90 95
Ala Tyr Leu Lys Thr Phe Cys Cys Asn Gln Asp Asp Asn
100 105

<210> 125
<211> 110
<212> PRT
<213> Homo sapiens

<400> 125
Met Ala Leu Trp Met Arg Leu Leu Pro Leu Leu Ala Leu Leu Ala Leu
1 5 10 15
Trp Gly Pro Asp Pro Ala Ala Ala Phe Val Asn Gln His Leu Cys Gly
20 25 30
Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Glu Arg Gly Phe
35 40 45
Phe Tyr Thr Pro Lys Thr Arg Arg Glu Ala Glu Asp Leu Gln Val Gly
50 55 60
Gln Val Glu Leu Gly Gly Gly Pro Gly Ala Gly Ser Leu Gln Pro Leu
65 70 75 80
Ala Leu Glu Gly Ser Leu Gln Lys Arg Gly Ile Val Glu Gln Cys Cys
85 90 95
Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys Asn
100 105 110

<210> 126
<211> 46
<212> PRT
<213> Caenorhabditis elegans

<220>
<221> VARIANT
<222> (1)...(46)
<223> Xaa = Any Amino Acid

<400> 126
Ala Cys Gly Arg Arg Leu Leu Leu Phe Val Trp Ser Thr Cys Gly Glu
1 5 10 15
Pro Cys Thr Xaa Xaa Xaa Gln Glu Asp Met Asp Ile Ala Thr Val Cys
20 25 30
Cys Thr Thr Gln Cys Thr Pro Ser Tyr Ile Lys Gln Ala Cys
35 40 45

<210> 127

<211> 46
 <212> PRT
 <213> Caenorhabditis elegans

 <220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

 <400> 127
 Ala Cys Gly Arg Lys Leu Ile Ser Leu Val Met Ala Val Cys Gly Asp
 1 5 10 15
 Leu Cys Asn Xaa Xaa Xaa Gln Glu Gly Lys Asp Ile Ala Thr Glu Cys
 20 25 30
 Cys Gly Asn Gln Cys Ser Asp Asp Tyr Ile Arg Ser Ala Cys
 35 40 45

<210> 128
 <211> 46
 <212> PRT
 <213> Caenorhabditis elegans

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 128
 Arg Cys Gly Arg Arg Ile His Ser Tyr Val Phe Ala Val Cys Gly Lys
 1 5 10 15
 Ala Cys Glu Xaa Xaa Xaa Ser Thr Glu Val Asn Ile Ala Ser Lys Cys
 20 25 30
 Cys Arg Glu Glu Cys Thr Asp Asp Phe Ile Arg Lys Gln Cys
 35 40 45

<210> 129
 <211> 46
 <212> PRT
 <213> Caenorhabditis elegans

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 129
 Arg Cys Gly Arg Lys Leu Tyr Thr Asp Val Leu Ser Ala Cys Asn Gly
 1 5 10 15
 Pro Cys Glu Xaa Xaa Xaa Gly Thr Glu Gln Asp Leu Ser Lys Leu Cys
 20 25 30
 Cys Gly Asn Gln Cys Thr Phe Asx Glu Ile Arg Lys Ala Cys
 35 40 45

<210> 130
 <211> 46
 <212> PRT

<213> Caenorhabditis elegans

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 130

Ile	Cys	Gly	Thr	Lys	Asx	Leu	Lys	Met	Val	Met	Val	Met	Cys	Gly	Gly
1				5				10						15	
Glu	Cys	Ser	Xaa	Xaa	Xaa	Ser	Thr	Asn	Glu	Asn	Ile	Ala	Thr	Glu	Cys
			20				25						30		
Cys	Glu	Lys	Met	Cys	Thr	Met	Glu	Asp	Ile	Thr	Thr	Lys	Cys		
		35					40					45			

<210> 131

<211> 46

<212> PRT

<213> Caenorhabditis elegans

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 131

Leu	Cys	Gly	Arg	Arg	Leu	Ile	Leu	Phe	Met	Leu	Ala	Thr	Cys	Gly	Glu
1				5				10						15	
Cys	Asp	Thr	Xaa	Xaa	Xaa	Asp	Ser	Ser	Glu	Asp	Leu	Ser	His	Ile	Cys
			20				25						30		
Cys	Ile	Lys	Gln	Cys	Asp	Val	Gln	Asp	Ile	Ile	Arg	Val	Cys		
		35					40					45			

<210> 132

<211> 46

<212> PRT

<213> Caenorhabditis elegans

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 132

Leu	Cys	Gly	Ser	His	Leu	Val	Glu	Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu
1				5				10						15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Leu	Gln	Lys	Arg	Gly	Ile	Val	Glu	Gln	Cys
			20				25						30		
Cys	Thr	Ser	Ile	Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr	Cys		
		35					40					45			

<210> 133

<211> 46

<212> PRT

<213> Rabbit

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 133
 Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Glu
 1 5 10 15
 Arg Gly Phe Xaa Xaa Xaa Thr Pro Lys Ser Gly Ile Val Glu Gln Cys
 20 25 30
 Cys Thr Ser Ile Cys Ser Leu Tyr Gln Leu Glu Asn Tyr Cys
 35 40 45

<210> 134
 <211> 46
 <212> PRT
 <213> *Xenopus laevis*

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 134
 Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Asp
 1 5 10 15
 Arg Gly Phe Xaa Xaa Xaa Lys Met Lys Arg Gly Ile Val Glu Gln Cys
 20 25 30
 Cys His Ser Thr Cys Ser Leu Phe Gln Leu Glu Ser Tyr Cys
 35 40 45

<210> 135
 <211> 46
 <212> PRT
 <213> *Xenopus laevis*

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 135
 Leu Cys Gly Ser His Leu Val Glu Ala Leu Tyr Leu Val Cys Gly Asp
 1 5 10 15
 Arg Gly Phe Xaa Xaa Xaa Lys Met Lys Arg Gly Ile Val Glu Gln Cys
 20 25 30
 Cys His Ser Thr Cys Ser Leu Phe Gln Leu Glu Asn Tyr Cys
 35 40 45

<210> 136
 <211> 46
 <212> PRT
 <213> Alligator

<220>
 <221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 136

Leu	Cys	Gly	Ser	His	Leu	Val	Asp	Ala	Leu	Tyr	Leu	Val	Cys	Gly	Glu
1				5					10					15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Ser	Pro	Lys	Gly	Gly	Ile	Val	Glu	Gln	Cys
			20					25					30		
Cys	His	Asn	Thr	Cys	Ser	Leu	Tyr	Gln	Leu	Glu	Asn	Tyr	Cys		
		35					40					45			

<210> 137

<211> 46

<212> PRT

<213> Elephant fish

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 137

Leu	Cys	Gly	Ser	His	Leu	Val	Asp	Ala	Leu	Tyr	Phe	Val	Cys	Gly	Glu
1				5					10					15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Pro	Lys	Gln	Ile	Gly	Ile	Val	Glu	Gln	Cys
			20					25					30		
Cys	His	Asn	Thr	Cys	Ser	Leu	Val	Asn	Leu	Glu	Gly	Tyr	Cys		
		35					40					45			

<210> 138

<211> 46

<212> PRT

<213> Bos taurus

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 138

Leu	Cys	Gly	Ala	Glu	Leu	Val	Asp	Ala	Leu	Gln	Phe	Val	Cys	Gly	Asp
1				5					10					15	
Arg	Gly	Phe	Xaa	Xaa	Xaa	Ala	Pro	Gln	Thr	Gly	Ile	Val	Asp	Glu	Cys
			20					25					30		
Cys	Phe	Arg	Ser	Cys	Asp	Leu	Arg	Arg	Leu	Glu	Met	Tyr	Cys		
		35					40					45			

<210> 139

<211> 46

<212> PRT

<213> Canis

<220>

<221> VARIANT

<222> (1)...(46)

<223> Xaa = Any Amino Acid

<400> 139
 Leu Cys Gly Ala Glu Leu Val Asp Ala Leu Gln Phe Val Cys Gly Asp
 1 5 10 15
 Arg Gly Phe Xaa Xaa Xaa Ala Pro Gln Thr Gly Ile Val Asp Glu Cys
 20 25 30
 Cys Phe Arg Ser Cys Asp Leu Arg Arg Leu Glu Met Tyr Cys
 35 40 45

<210> 140
 <211> 46
 <212> PRT
 <213> Horse

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 140
 Leu Cys Gly Gly Glu Leu Val Asp Thr Leu Gln Phe Val Cys Gly Asp
 1 5 10 15
 Arg Gly Phe Xaa Xaa Xaa Arg Arg Ser Arg Gly Ile Val Glu Glu Cys
 20 25 30
 Cys Phe Arg Ser Cys Asp Leu Ala Leu Leu Glu Thr Tyr Cys
 35 40 45

<210> 141
 <211> 46
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 141
 Leu Cys Gly Gly Glu Leu Val Asp Thr Leu Gln Phe Val Cys Gly Asp
 1 5 10 15
 Arg Gly Phe Xaa Xaa Xaa Arg Arg Ser Arg Gly Ile Val Glu Glu Cys
 20 25 30
 Cys Phe Arg Ser Cys Asp Leu Ala Leu Leu Glu Thr Tyr Cys
 35 40 45

<210> 142
 <211> 46
 <212> PRT
 <213> Amphioxus

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 142
 Leu Cys Gly Ser Thr Leu Ala Asp Val Leu Ser Phe Val Cys Gly Asn

1		5		10		15									
Arg	Gly	Tyr	Xaa	Xaa	Xaa	Arg	Arg	Arg	Arg	Gly	Leu	Val	Glu	Glu	Cys
			20					25					30		
Cys	Tyr	Asn	Val	Cys	Asp	Tyr	Ser	Gln	Leu	Glu	Ser	Tyr	Cys		
		35					40					45			

<210> 143
 <211> 46
 <212> PRT
 <213> Locust

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 143
Tyr Cys Gly Glu Lys Leu Ser Asn Ala Leu Lys Leu Val Cys Arg Gly
1 5 10 15
Asn Tyr Asn Xaa Xaa Xaa Arg Arg Thr Arg Gly Val Phe Asp Glu Cys
20 25 30
Cys Arg Lys Ser Cys Ser Ile Ser Glu Leu Gln Thr Tyr Cys
35 40 45

<210> 144
 <211> 46
 <212> PRT
 <213> Bommo

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 144
Tyr Cys Gly Arg His Leu Ala Arg Thr Leu Ala Asp Leu Cys Trp Glu
1 5 10 15
Ala Gly Val Xaa Xaa Xaa Arg Gly Lys Arg Gly Ile Val Asp Glu Cys
20 25 30
Cys Leu Arg Pro Cys Ser Val Asp Val Leu Leu Ser Tyr Cys
35 40 45

<210> 145
 <211> 46
 <212> PRT
 <213> Bommo

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 145
Tyr Cys Gly Arg His Leu Ala Asp Thr Leu Ala Asp Leu Cys Phe Gly
1 5 10 15
Val Glu Lys Xaa Xaa Xaa Arg Gly Lys Arg Gly Val Val Asp Glu Cys

35

40

45

<210> 149
 <211> 46
 <212> PRT
 <213> Bombyx mori

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 149
 Tyr Cys Gly Arg Arg Leu Ala Ile Met Leu Ser Tyr Leu Cys Asp Asn
 1 5 10 15
 Gln Tyr Leu Xaa Xaa Xaa Gly Lys Arg Gln Gly Ile Ala Glu Glu Cys
 20 25 30
 Cys Asn Lys Pro Cys Thr Glu Asp Glu Leu Leu Gly Tyr Cys
 35 40 45

<210> 150
 <211> 46
 <212> PRT
 <213> Caenorhabditis elegans

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 150
 Leu Cys Gly Ser Arg Leu Thr Thr Thr Leu Leu Ala Val Cys Arg Asn
 1 5 10 15
 Gln Leu Cys Xaa Xaa Xaa Gln Lys Arg Gly Gly Ile Ala Thr Glu Cys
 20 25 30
 Cys Glu Lys Arg Cys Ser Phe Ala Tyr Leu Lys Thr Phe Cys
 35 40 45

<210> 151
 <211> 46
 <212> PRT
 <213> Moi 3

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 151
 Leu Cys Gly Ser Thr Leu Ala Asn Met Val Gln Trp Leu Cys Ser Thr
 1 5 10 15
 Tyr Thr Thr Xaa Xaa Xaa Glu Ser Arg Pro Ser Ile Val Cys Glu Cys
 20 25 30
 Cys Phe Asn Gln Cys Thr Val Gln Glu Leu Leu Ala Tyr Cys
 35 40 45

<210> 152
 <211> 46
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 152
 Leu Cys Gly Arg Glu Leu Val Arg Ala Gln Ile Ala Ile Cys Gly Met
 1 5 10 15
 Ser Thr Trp Xaa Xaa Arg Pro Tyr Val Ala Leu Phe Glu Lys Cys
 20 25 30
 Cys Leu Ile Gly Cys Thr Lys Arg Ser Leu Ala Lys Tyr Cys
 35 40 45

<210> 153
 <211> 46
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> (1)...(46)
 <223> Xaa = Any Amino Acid

<400> 153
 Leu Cys Gly His His Phe Val Arg Ala Leu Val Arg Val Cys Gly Gly
 1 5 10 15
 Pro Arg Trp Xaa Xaa Xaa Ala Ala Ala Thr Asn Pro Ala Arg Tyr Cys
 20 25 30
 Cys Leu Ser Gly Cys Thr Gln Gln Asp Leu Leu Thr Leu Cys
 35 40 45

<210> 154
 <211> 541
 <212> PRT
 <213> Caenorhabditis elegans

<400> 154
 Met Ser Met Thr Ser Leu Ser Thr Lys Ser Arg Arg Gln Glu Asp Val
 1 5 10 15
 Val Ile Glu Gly Trp Leu His Lys Lys Gly Glu His Ile Arg Asn Trp
 20 25 30
 Arg Pro Arg Tyr Phe Met Ile Phe Asn Asp Gly Ala Leu Leu Gly Phe
 35 40 45
 Arg Ala Lys Pro Lys Glu Gly Gln Pro Phe Pro Glu Pro Leu Asn Asp
 50 55 60
 Phe Met Ile Lys Asp Ala Ala Thr Met Leu Phe Glu Lys Pro Arg Pro
 65 70 75 80
 Asn Met Phe Met Val Arg Cys Leu Gln Trp Thr Thr Val Ile Glu Arg
 85 90 95
 Thr Phe Tyr Ala Glu Ser Ala Glu Val Arg Gln Arg Trp Ile His Ala
 100 105 110
 Ile Glu Ser Ile Ser Lys Lys Tyr Lys Gly Thr Asn Ala Asn Pro Gln

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<210> 155
<211> 546
<212> PRT
<213> Caenorhabditis elegans
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<400> 155

Met	Ser	Met	Thr	Ser	Leu	Ser	Thr	Lys	Ser	Arg	Arg	Gln	Glu	Asp	Val
1				5				10						15	
Val	Ile	Glu	Gly	Trp	Leu	His	Lys	Lys	Gly	Glu	His	Ile	Arg	Asn	Trp
		20					25					30			
Arg	Pro	Arg	Tyr	Phe	Met	Ile	Phe	Asn	Asp	Gly	Ala	Leu	Leu	Gly	Phe
	35						40					45			
Arg	Ala	Lys	Pro	Lys	Glu	Gly	Gln	Pro	Phe	Pro	Glu	Pro	Leu	Asn	Asp
	50				55					60					
Phe	Met	Ile	Lys	Asp	Ala	Ala	Thr	Met	Leu	Phe	Glu	Lys	Pro	Arg	Pro
65				70					75					80	
Asn	Met	Phe	Met	Val	Arg	Cys	Leu	Gln	Trp	Thr	Thr	Val	Ile	Glu	Arg
			85					90					95		
Thr	Phe	Tyr	Ala	Glu	Ser	Ala	Glu	Val	Arg	Gln	Arg	Trp	Ile	His	Ala
		100					105						110		
Ile	Glu	Ser	Ile	Ser	Lys	Lys	Tyr	Lys	Gly	Thr	Asn	Ala	Asn	Pro	Gln
	115						120					125			
Glu	Glu	Leu	Met	Glu	Thr	Asn	Gln	Gln	Pro	Lys	Ile	Asp	Glu	Asp	Ser
	130				135						140				
Glu	Phe	Ala	Gly	Ala	Ala	His	Ala	Ile	Met	Gly	Gln	Pro	Ser	Ser	Gly
145				150					155					160	
His	Gly	Asp	Asn	Cys	Ser	Ile	Asp	Phe	Arg	Ala	Ser	Met	Ile	Ser	Ile
			165					170					175		
Ala	Asp	Thr	Ser	Glu	Ala	Ala	Lys	Arg	Asp	Lys	Ile	Thr	Met	Glu	Asp
		180						185					190		
Phe	Asp	Phe	Leu	Lys	Val	Leu	Gly	Lys	Gly	Thr	Phe	Gly	Lys	Val	Ile
	195					200					205				
Leu	Cys	Lys	Glu	Lys	Arg	Thr	Gln	Lys	Leu	Tyr	Ala	Ile	Lys	Ile	Leu
	210					215					220				
Lys	Lys	Asp	Val	Ile	Ile	Ala	Arg	Glu	Glu	Val	Ala	His	Thr	Leu	Thr
225				230					235					240	
Glu	Asn	Arg	Val	Leu	Gln	Arg	Cys	Lys	His	Pro	Phe	Leu	Thr	Glu	Leu
			245					250					255		
Lys	Tyr	Ser	Phe	Gln	Thr	Asn	Asp	Arg	Leu	Cys	Phe	Val	Met	Glu	Phe
		260					265						270		
Ala	Ile	Gly	Gly	Asp	Leu	Tyr	Tyr	His	Leu	Asn	Arg	Glu	Val	Gln	Met
	275					280					285				
Asn	Lys	Glu	Gly	Phe	Ser	Glu	Pro	Arg	Ala	Arg	Phe	Tyr	Gly	Ser	Glu
	290					295					300				
Ile	Val	Leu	Ala	Leu	Gly	Tyr	Leu	His	Ala	Asn	Ser	Ile	Val	Tyr	Arg
305				310					315					320	
Asp	Leu	Lys	Leu	Glu	Asn	Leu	Leu	Leu	Asp	Lys	Asp	Gly	His	Ile	Lys
			325					330					335		
Ile	Ala	Asp	Phe	Gly	Leu	Cys	Lys	Glu	Glu	Ile	Ser	Phe	Gly	Asp	Lys
		340					345						350		
Thr	Ser	Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	Leu
		355				360						365			
Asp	Asp	His	Asp	Tyr	Gly	Arg	Cys	Val	Asp	Trp	Trp	Gly	Val	Gly	Val
	370				375						380				
Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	Ser	Lys	Asp
385				390					395					400	
His	Asn	Lys	Leu	Phe	Glu	Leu	Ile	Met	Ala	Gly	Asp	Leu	Arg	Phe	Pro
			405					410					415		
Ser	Lys	Leu	Ser	Gln	Glu	Ala	Arg	Thr	Leu	Leu	Thr	Gly	Leu	Leu	Val
		420					425					430			
Lys	Asp	Pro	Thr	Gln	Arg	Leu	Gly	Gly	Gly	Pro	Glu	Asp	Ala	Leu	Glu
	435					440					445				
Ile	Cys	Arg	Ala	Asp	Phe	Phe	Arg	Thr	Val	Asp	Trp	Glu	Ala	Thr	Tyr
	450				455						460				

Arg	Lys	Glu	Ile	Glu	Pro	Pro	Tyr	Lys	Pro	Asn	Val	Gln	Ser	Glu	Thr
465					470					475					480
Asp	Thr	Ser	Tyr	Phe	Asp	Asn	Glu	Phe	Thr	Ser	Gln	Pro	Val	Gln	Leu
				485					490					495	
Thr	Pro	Pro	Ser	Arg	Ser	Gly	Ala	Leu	Ala	Thr	Val	Asp	Glu	Gln	Glu
			500					505					510		
Glu	Met	Gln	Ser	Asn	Phe	Thr	Gln	Phe	Ser	Phe	His	Asn	Val	Met	Gly
		515					520					525			
Ser	Ile	Asn	Arg	Ile	His	Glu	Ala	Ser	Glu	Asp	Asn	Glu	Asp	Tyr	Asp
	530					535					540				
Met	Gly														
545															

<210> 156
 <211> 483
 <212> PRT
 <213> Caenorhabditis elegans

<400> 156															
Met	Ser	Thr	Glu	Asn	Ala	His	Leu	Gln	Lys	Glu	Asp	Ile	Val	Ile	Glu
1				5					10					15	
Ser	Trp	Leu	His	Lys	Lys	Gly	Glu	His	Ile	Arg	Asn	Trp	Arg	Pro	Arg
		20						25					30		
Tyr	Phe	Ile	Leu	Phe	Arg	Asp	Gly	Thr	Leu	Leu	Gly	Phe	Arg	Ser	Lys
		35					40					45			
Pro	Lys	Glu	Asp	Gln	Pro	Leu	Pro	Glu	Pro	Leu	Asn	Asn	Phe	Met	Ile
	50					55					60				
Arg	Asp	Ala	Ala	Thr	Val	Cys	Leu	Asp	Lys	Pro	Arg	Pro	Asn	Met	Phe
65					70					75					80
Ile	Val	Arg	Cys	Leu	Gln	Trp	Thr	Thr	Val	Ile	Glu	Arg	Thr	Phe	Tyr
			85						90					95	
Ala	Asp	Ser	Ala	Asp	Phe	Arg	Gln	Met	Trp	Ile	Glu	Ala	Ile	Gln	Ala
			100					105					110		
Val	Ser	Ser	His	Asn	Arg	Leu	Lys	Glu	Asn	Ala	Gly	Asn	Thr	Ser	Met
		115					120					125			
Gln	Glu	Glu	Asp	Thr	Asn	Gly	Asn	Pro	Ser	Gly	Glu	Ser	Asp	Val	Asn
		130				135					140				
Met	Asp	Ala	Thr	Ser	Thr	Arg	Ser	Asp	Asn	Asp	Phe	Glu	Ser	Thr	Val
145					150					155					160
Met	Asn	Ile	Asp	Glu	Pro	Glu	Glu	Val	Pro	Arg	Lys	Asn	Thr	Val	Thr
			165						170					175	
Met	Asp	Asp	Phe	Asp	Phe	Leu	Lys	Val	Leu	Gly	Gln	Gly	Thr	Phe	Gly
			180					185					190		
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Arg Ile Gln Gln Leu Asp Phe Ser Phe Pro Gln Gly Phe Pro Gln Gln
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Ala Ser Gln Ile Ala Lys Ile Leu Val Arg Asp Pro Ser Thr Arg
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Trp Val Asn Ile Ala Asn Ile Lys Pro Pro Val Leu His Ala Tyr Ile
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Pro Ala Thr Phe Gly Gln Tyr Tyr Ser Asn Ile Gly Pro Val
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Gln Pro Gly Leu Asp Arg Ala Leu Phe Arg Leu Met Asn Leu Gly
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<212> PRT
 <213> Homo sapiens
 <400> 163
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 Ser Asn Ala Ser Thr Ile Ser Gly Arg Leu Ser Pro Ile Met Thr Gln
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 Gln Asp Asp Leu Gly Gln 50
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 <212> PRT
 <213> Caenorhabditis elegans
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 Ser Phe Arg Pro Arg Thr Gln Ser Asn Leu Ser Ile Pro Gly Ser Ser
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 Ser
 <210> 165
 <211> 42
 <212> PRT
 <213> Homo sapiens
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 Lys Ala Ala Ala Ile Ile Asp Leu Asp Pro Asp Phe Gln Pro Gln Ser
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 <211> 22
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 <213> Homo sapiens
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 Ala Asp Pro Asp Phe Gln Pro Arg Pro Arg Ser Cys Thr Trp Pro Leu
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 Pro Arg Pro Gln Ser Pro 20
 <210> 167
 <211> 42
 <212> PRT
 <213> Homo sapiens
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 Gln Ala Pro Gln Val Val Gln Ile Asp Pro Asp Phe Gln Pro Leu Pro

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 Ser Asn Ser Ala Thr Ser Ser Pro Ala Pro

<210> 168
 <211> 41
 <212> PRT
 <213> Caenorhabditis elegans
 <400> 168
 Thr Phe Met Asn Thr Pro Asp Asp Val Met Met Asn Asp Asp Met Gln
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 Pro Ile Pro Arg Asp Arg Cys Asn Thr Trp Pro Met Arg Arg Pro Gln
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 Leu Gln Pro Pro Leu Asn Ser Ser Pro
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<210> 169
 <211> 14
 <212> PRT
 <213> Caenorhabditis elegans or Homo sapiens
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 Thr Pro Val Asp Gln Pro Pro Arg Arg Thr Trp Pro Arg Pro
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<210> 170
 <211> 80
 <212> PRT
 <213> Mus musculus or Homo sapiens
 <400> 170
 Leu Gln Lys Gln Ala Gly Gly Asn Pro Trp His Gln Phe Val Gln Asn
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 Asn Leu Ile Leu Lys Met Gly Pro Val Asp Lys Arg Lys Gly Leu Phe
 20 25 30
 Ala Arg Arg Arg Gln Leu Leu Thr Gln Gly Pro His Leu Tyr Tyr
 35 40 45
 Val Asp Pro Val Asn Lys Val Leu Lys Gly Gln Ile Pro Trp Ser Gln
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 Gln Leu Arg Pro Gln Ala Lys Asn Phe Lys Thr Phe Val His Thr
 65 70 75 80

<210> 171
 <211> 47
 <212> PRT
 <213> Mus musculus or Homo sapiens or C elegans
 <400> 171
 Leu Gln Gln Asn Pro His Phe Asn Leu Ile Leu Lys Gly Lys Gly Leu
 1 5 10 15
 Phe Ala Arg Arg Arg Leu Leu Thr Gln Gly Pro His Leu Tyr Asp Asn
 20 25 30

Val Leu Lys Gly Glu Pro Trp Glu Lys Asn Thr Phe Phe His Thr
 35 40 45

<210> 172
 <211> 80
 <212> PRT
 <213> Caenorhabditis elegans

<400> 172
 Leu Glu Glu Gln Arg Val Lys Asn Pro Phe His Ile Phe Thr Asn Asn
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 Ser Leu Ile Leu Lys Gln Gly Tyr Leu Glu Lys Lys Arg Gly Leu Phe
 20 25 30
 Ala Arg Arg Arg Met Phe Leu Leu Thr Glu Gly Pro His Leu Leu Tyr
 35 40 45
 Ile Asp Val Pro Asn Leu Val Leu Lys Gly Glu Val Pro Trp Thr Pro
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 Cys Met Gln Val Glu Leu Lys Asn Ser Gly Thr Phe Phe Ile His Thr
 65 70 75 80

<210> 173
 <211> 113
 <212> PRT
 <213> Mus musculus or Homo sapiens

<400> 173
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 Leu Pro Pro Phe Arg Ala Gly Asn Glu Tyr Leu Ile Phe Gln Lys Ile
 20 25 30
 Ile Lys Leu Glu Tyr Asp Phe Pro Glu Lys Phe Phe Pro Lys Ala Arg
 35 40 45
 Asp Leu Val Glu Lys Leu Leu Val Leu Asp Ala Thr Lys Arg Leu Gly
 50 55 60
 Cys Glu Glu Met Glu Gly Tyr Gly Pro Leu Lys Ala His Pro Phe Phe
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 Thr Ala Tyr Leu Pro Ala Met Ser Glu Asp Asp Glu Asp Cys Tyr Gly
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 <211> 48
 <212> PRT
 <213> Mus musculus or Homo sapiens or C elegans

<400> 174
 Asp Trp Leu Gly Cys Ile Gln Ala Gly Pro Pro Phe Arg Ala Asn Tyr
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 20 25 30
 Phe Phe Glu Val Trp Asn Pro Pro Leu Ala Tyr Pro Ala Glu Tyr Asn
 35 40 45

<210> 175
 <211> 122
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 175
 Thr Asp Ile Trp Gly Leu Gly Cys Ile Leu Phe Gln Cys Leu Ala Gly
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 Gln Pro Pro Phe Arg Ala Val Asn Gln Tyr His Leu Leu Lys Arg Ile
 20 25 30
 Gln Glu Leu Asp Phe Ser Phe Pro Glu Gly Phe Pro Glu Glu Ala Ser
 35 40 45
 Glu Ile Ile Ala Lys Ile Leu Val Gly His Glu Thr Leu Lys Thr Glu
 50 55 60
 Tyr Val Ile Phe Asn Leu Gln Val Arg Asp Pro Ser Thr Arg Ile Thr
 65 70 75 80
 Ser Gln Glu Leu Met Ala His Lys Phe Phe Glu Asn Val Asp Trp Val
 85 90 95
 Asn Ile Ala Asn Ile Lys Pro Pro Val Leu His Ala Tyr Ile Pro Ala
 100 105 110
 Thr Phe Gly Glu Pro Glu Tyr Tyr Ser Asn
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<210> 176
 <211> 72
 <212> PRT
 <213> *Mus musculus* or *Homo sapiens*

<400> 176
 Phe Gly Leu Ser Tyr Ala Lys Asn Gly Glu Leu Leu Lys Tyr Ile Arg
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 Lys Ile Gly Ser Phe Asp Glu Thr Cys Thr Arg Phe Tyr Thr Ala Glu
 20 25 30
 Ile Val Ser Ala Leu Glu Tyr Leu His Gly Lys Gly Ile Ile His Arg
 35 40 45
 Asp Leu Lys Pro Glu Asn Ile Leu Leu Asn Glu Asp Met His Ile Gln
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 Ile Thr Asp Phe Gly Thr Ala Lys
 65 70

<210> 177
 <211> 31
 <212> PRT
 <213> *Mus musculus* or *Homo sapiens* or *C. elegans*

<400> 177
 Phe Asn Gly Leu Gly Ser Phe Asp Phe Glu Ile Leu Leu His Ile His
 1 5 10 15
 Arg Asp Lys Pro Asn Leu Asp His Ile Ile Thr Asp Phe Gly Ala
 20 25 30

<210> 178
 <211> 72
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 178
Phe Val Ile Gly Leu Val Glu Asn Gly Asp Leu Gly Glu Ser Leu Cys
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His Phe Gly Ser Phe Asp Met Leu Thr Ser Lys Phe Phe Ala Ser Glu
20 25 30
Ile Leu Thr Gly Leu Gln Phe Leu His Asp Asn Lys Ile Val His Arg
35 40 45
Asp Met Lys Pro Asp Asn Val Leu Ile Gln Lys Asp Gly His Ile Leu
50 55 60
Ile Thr Asp Phe Gly Ser Ala Gln
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<210> 179
<211> 48
<212> PRT
<213> Mus musculus or Homo sapiens

<400> 179
Tyr Ala Ile Lys Ile Leu Glu Lys Arg His Ile Ile Lys Glu Asn Lys
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Val Pro Tyr Val Thr Arg Glu Arg Asp Val Met Ser Arg Leu Asp His
20 25 30
Pro Phe Phe Val Lys Leu Tyr Phe Thr Phe Gln Asp Asp Glu Lys Leu
35 40 45

<210> 180
<211> 15
<212> PRT
<213> Mus musculus or Homo sapiens or C elegans

<400> 180
Ala Lys Leu Lys Lys Arg Glu Leu His Pro Phe Leu Tyr Phe Asp
1 5 10 15

<210> 181
<211> 53
<212> PRT
<213> Caenorhabditis elegans

<400> 181
Phe Ala Val Lys Val Leu Gln Lys Ser Tyr Leu Asn Arg His Gln Lys
1 5 10 15
Met Asp Ala Ile Ile Arg Glu Lys Asn Ile Leu Thr Tyr Leu Ser Gln
20 25 30
Glu Cys Gly Gly His Pro Phe Val Thr Gln Leu Tyr Thr His Phe His
35 40 45
Asp Gln Ala Arg Ile
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<210> 182
<211> 29
<212> PRT
<213> Mus musculus or Homo sapiens

<400> 182

Pro Asn Arg Thr Tyr Tyr Leu Met Asp Pro Ser Gly Asn Ala His Lys
 1 5 10 15
 Trp Cys Arg Lys Ile Gln Glu Val Trp Arg Gln Arg Tyr
 20 25

<210> 183
 <211> 15
 <212> PRT
 <213> Mus musculus or Homo sapiens or C elegans

<400> 183
 Pro Asn Arg Tyr Tyr Leu Asp Ala Trp Cys Ile Val Arg Arg Tyr
 1 5 10 15

<210> 184
 <211> 28
 <212> PRT
 <213> Caenorhabditis elegans

<400> 184
 Pro Asn Arg Val Tyr Tyr Leu Phe Asp Leu Glu Lys Lys Ala Asp Glu
 1 5 10 15
 Trp Cys Lys Ala Ile Asn Asp Val Arg Lys Arg Tyr
 20 25

<210> 185
 <211> 25
 <212> PRT
 <213> Mus musculus or Homo sapiens

<400> 185
 Pro Glu Ser Lys Gln Ala Arg Ala Asn Ser Phe Val Gly Thr Ala Gln
 1 5 10 15
 Tyr Val Ser Pro Glu Leu Leu Thr Glu
 20 25

<210> 186
 <211> 15
 <212> PRT
 <213> Mus musculus or Homo sapiens or C elegans

<400> 186
 Pro Glu Ala Arg Phe Val Gly Thr Ala Tyr Val Ser Pro Glu Leu
 1 5 10 15

<210> 187
 <211> 25
 <212> PRT
 <213> Caenorhabditis elegans

<400> 187
 Pro Glu Glu Asn Thr Ala Arg Arg Thr Thr Phe Val Gly Thr Ala Leu
 1 5 10 15
 Tyr Val Ser Pro Glu Met Leu Ala Asp

20

25

<210> 188
 <211> 62
 <212> PRT
 <213> Caenorhabditis elegans

<400> 188
 Lys Arg Thr Ser Asn Asp Phe Met Phe Leu Gln Ser Met Gly Glu Gly
 1 5 10 15
 Ala Tyr Ser Gln Val Phe Arg Cys Arg Glu Val Ala Thr Asp Ala Met
 20 25 30
 Phe Ala Val Lys Val Leu Gln Lys Ser Tyr Leu Asn Arg His Gln Lys
 35 40 45
 Met Asp Ala Ile Ile Arg Glu Lys Asn Ile Leu Thr Tyr Leu
 50 55 60

<210> 189
 <211> 21
 <212> PRT
 <213> Caenorhabditis elegans or Homo sapiens

<400> 189
 Lys Asp Phe Phe Gly Glu Gly Ser Val Arg Glu Ala Thr Ala Lys Leu
 1 5 10 15
 Lys Lys Arg Glu Leu
 20

<210> 190
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 190
 Lys Lys Arg Pro Glu Asp Phe Lys Phe Gly Lys Ile Leu Gly Glu Gly
 1 5 10 15
 Ser Phe Ser Thr Val Val Leu Ala Arg Glu Leu Ala Thr Ser Arg Glu
 20 25 30
 Tyr Ala Ile Lys Ile Leu Glu Lys Arg His Ile Ile Lys Glu Asn Lys
 35 40 45
 Val Pro Tyr Val Thr Arg Glu Arg Asp Val Met Ser Arg Leu
 50 55 60

<210> 191
 <211> 90
 <212> PRT
 <213> Caenorhabditis elegans

<400> 191
 His Pro Phe Val Thr Gln Leu Tyr Thr His Phe His Asp Gln Ala Arg
 1 5 10 15
 Ile Tyr Phe Val Ile Gly Leu Val Glu Asn Gly Asp Leu Gly Glu Ser
 20 25 30
 Leu Cys His Phe Gly Ser Phe Asp Met Leu Thr Ser Lys Phe Phe Ala
 35 40 45

Ser Glu Ile Leu Thr Gly Leu Gln Phe Leu His Asp Asn Lys Ile Val
50 55 60
His Arg Asp Met Lys Pro Asp Asn Val Leu Ile Gln Lys Asp Gly His
65 70 75 80
Ile Leu Ile Thr Asp Phe Gly Ser Ala Gln
85 90

<210> 192
<211> 39
<212> PRT
<213> *Caenorhabditis elegans*

<400> 192
His Pro Phe Leu Tyr Phe Asp Tyr Phe Asn Gly Leu Gly Ser Phe Asp
1 5 10 15
Phe Glu Ile Leu Leu His Ile His Arg Asp Lys Pro Asn Leu Asp His
20 25 30
Ile Ile Thr Asp Phe Gly Ala
35

<210> 193
<211> 90
<212> PRT
<213> *Homo sapiens*

<400> 193
His Pro Phe Phe Val Lys Leu Tyr Phe Thr Phe Gln Asp Asp Glu Lys
1 5 10 15
Leu Tyr Phe Gly Leu Ser Tyr Ala Lys Asn Gly Glu Leu Leu Lys Tyr
20 25 30
Ile Arg Lys Ile Gly Ser Phe Asp Glu Thr Cys Thr Arg Phe Tyr Thr
35 40 45
Ala Glu Ile Val Ser Ala Leu Glu Tyr Leu His Gly Lys Gly Ile Ile
50 55 60
His Arg Asp Leu Lys Pro Glu Asn Ile Leu Leu Asn Glu Asp Met His
65 70 75 80
Ile Gln Ile Thr Asp Phe Gly Thr Ala Lys
85 90

<210> 194
<211> 98
<212> PRT
<213> *Caenorhabditis elegans*

<400> 194
Glu Glu Asn Thr Ala Arg Arg Thr Thr Phe Val Gly Thr Ala Leu Tyr
1 5 10 15
Val Ser Pro Glu Met Leu Ala Asp Gly Asp Val Gly Pro Gln Thr Asp
20 25 30
Ile Trp Gly Leu Gly Cys Ile Leu Phe Gln Cys Leu Ala Gly Gln Pro
35 40 45
Pro Phe Arg Ala Val Asn Gln Tyr His Leu Leu Lys Arg Ile Gln Glu
50 55 60
Leu Asp Phe Ser Phe Pro Glu Gly Phe Pro Glu Glu Ala Ser Glu Ile
65 70 75 80
Ile Ala Lys Ile Leu Val Arg Asp Pro Ser Thr Arg Ile Thr Ser Gln

85 90 95

Glu Leu

<210> 195
 <211> 43
 <212> PRT
 <213> Caenorhabditis elegans or Homo sapiens

<400> 195
 Glu Ala Arg Phe Val Gly Thr Ala Tyr Val Ser Pro Glu Leu Asp Trp
 1 5 10 15
 Leu Gly Cys Ile Gln Ala Gly Pro Pro Phe Arg Ala Asn Tyr Ile Leu
 20 25 30
 Phe Pro Glu Phe Ala Lys Leu Val Asp Arg Glu
 35 40

<210> 196
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 196
 Glu Ser Lys Gln Ala Arg Ala Asn Ser Phe Val Gly Thr Ala Gln Tyr
 1 5 10 15
 Val Ser Pro Glu Leu Leu Thr Glu Lys Ser Ala Cys Lys Ser Ser Asp
 20 25 30
 Leu Trp Ala Leu Gly Cys Ile Ile Tyr Gln Leu Val Ala Gly Leu Pro
 35 40 45
 Pro Phe Arg Ala Gly Asn Glu Tyr Leu Ile Phe Gln Lys Ile Ile Lys
 50 55 60
 Leu Glu Tyr Asp Phe Pro Glu Lys Phe Phe Pro Lys Ala Arg Asp Leu
 65 70 75 80
 Val Glu Lys Leu Leu Val Leu Asp Ala Thr Lys Arg Leu Gly Cys Glu
 85 90 95

Glu Met

<210> 197
 <211> 35
 <212> PRT
 <213> Caenorhabditis elegans

<400> 197
 Leu Met Ala His Lys Phe Phe Glu Asn Val Asp Trp Val Asn Ile Ala
 1 5 10 15
 Asn Ile Lys Pro Pro Val Leu His Ala Tyr Ile Pro Ala Thr Phe Gly
 20 25 30
 Glu Pro Glu
 35

<210> 198
 <211> 17
 <212> PRT
 <213> Caenorhabditis elegans or Homo sapiens

<400> 198

Leu Ala His Phe Phe Glu Val Trp Asn Pro Pro Leu Ala Tyr Pro Ala
1 5 10 15
Glu

<210> 199

<211> 35

<212> PRT

<213> Homo sapiens

<400> 199

Leu Lys Ala His Pro Phe Phe Glu Ser Val Thr Trp Glu Asn Leu His
1 5 10 15
Gln Gln Thr Pro Pro Lys Leu Thr Ala Tyr Leu Pro Ala Met Ser Glu
20 25 30
Asp Asp Glu
35

<210> 200

<211> 104

<212> PRT

<213> Caenorhabditis elegans

<400> 200

Leu Glu Glu Gln Arg Val Lys Asn Pro Phe His Ile Phe Thr Asn Asn
1 5 10 15
Ser Leu Ile Leu Lys Gln Gly Tyr Leu Glu Lys Lys Arg Gly Leu Phe
20 25 30
Ala Arg Arg Arg Met Phe Leu Leu Thr Glu Gly Pro His Leu Leu Tyr
35 40 45
Ile Asp Val Pro Asn Leu Val Leu Lys Gly Glu Val Pro Trp Thr Pro
50 55 60
Cys Met Gln Val Glu Leu Lys Asn Ser Gly Thr Phe Phe Ile His Thr
65 70 75 80
Pro Asn Arg Val Tyr Tyr Leu Phe Asp Leu Glu Lys Lys Ala Asp Glu
85 90 95
Trp Cys Lys Ala Ile Asn Asp Val
100

<210> 201

<211> 59

<212> PRT

<213> Caenorhabditis elegans or Homo sapiens

<400> 201

Leu Glu Gln Asn Pro His Phe Asn Leu Ile Leu Lys Gly Lys Gly Leu
1 5 10 15
Phe Ala Arg Arg Arg Leu Leu Thr Glu Gly Pro His Leu Tyr Asp Asn
20 25 30
Val Leu Lys Gly Glu Pro Trp Glu Lys Asn Thr Phe Phe His Thr Pro
35 40 45
Asn Arg Tyr Tyr Leu Asp Ala Trp Cys Ile Val
50 55

<210> 202
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 202
 Leu Glu Lys Gln Ala Gly Gly Asn Pro Trp His Gln Phe Val Glu Asn
 1 5 10 15
 Asn Leu Ile Leu Lys Met Gly Pro Val Asp Lys Arg Lys Gly Leu Phe
 20 25 30
 Ala Arg Arg Arg Gln Leu Leu Leu Thr Glu Gly Pro His Leu Tyr Tyr
 35 40 45
 Val Asp Pro Val Asn Lys Val Leu Lys Gly Glu Ile Pro Trp Ser Gln
 50 55 60
 Glu Leu Arg Pro Glu Ala Lys Asn Phe Lys Thr Phe Phe Val His Thr
 65 70 75 80
 Pro Asn Arg Thr Tyr Tyr Leu Met Asp Pro Ser Gly Asn Ala His Lys
 85 90 95
 Trp Cys Arg Lys Ile Gln Glu Val
 100

<210> 203
 <211> 45
 <212> PRT
 <213> Homo sapiens

<400> 203
 Lys Leu Glu Asn Leu Met Leu Asp Lys Asp Gly His Ile Lys Ile Thr
 1 5 10 15
 Asp Phe Gly Leu Cys Lys Glu Gly Ile Lys Asp Gly Ala Thr Met Lys
 20 25 30
 Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val
 35 40 45

<210> 204
 <211> 36
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 204
 Lys Leu Glu Asn Leu Leu Asp Lys Asp Gly His Ile Lys Ile Asp Phe
 1 5 10 15
 Gly Leu Cys Lys Glu Ile Gly Thr Phe Cys Gly Thr Pro Glu Tyr Leu
 20 25 30
 Ala Pro Glu Val
 35

<210> 205
 <211> 45
 <212> PRT
 <213> Caenorhabditis elegans

<400> 205
 Lys Leu Glu Asn Leu Leu Asp Lys Asp Gly His Ile Lys Ile Ala
 1 5 10 15
 Asp Phe Gly Leu Cys Lys Glu Glu Ile Ser Phe Gly Asp Lys Thr Ser

Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val
		20					25					30
		35					40					45

<210> 206
 <211> 62
 <212> PRT
 <213> Caenorhabditis elegans

Leu	Cys	Lys	Glu	Glu	Ile	Lys	Tyr	Gly	Asp	Lys	Thr	Ser	Thr	Phe	Cys
1				5				10						15	
Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	Ile	Glu	Asp	Ile	Asp	Tyr
		20					25					30			
Asp	Arg	Ser	Val	Asp	Trp	Trp	Gly	Val	Gly	Val	Val	Met	Tyr	Glu	Met
		35				40						45			
Met	Cys	Gly	Arg	Leu	Pro	Phe	Ser	Ala	Lys	Glu	Asn	Gly	Lys		
	50					55					60				

<210> 207
 <211> 43
 <212> PRT
 <213> Caenorhabditis elegans or Mus musculus

Leu	Cys	Lys	Glu	Ile	Gly	Thr	Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala
1				5					10					15	
Pro	Glu	Val	Glu	Asp	Asp	Tyr	Arg	Val	Asp	Trp	Trp	Gly	Gly	Val	Val
		20					25					30			
Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe					
		35					40								

<210> 208
 <211> 492
 <212> PRT
 <213> Caenorhabditis elegans

Met	Gly	Val	Asn	Asp	His	Asp	Val	Ser	Val	Pro	Leu	Gln	Glu	Val	Gln
1				5					10					15	
Ser	Arg	Thr	Val	Glu	Gly	Lys	Leu	Thr	Lys	Cys	Leu	Ala	Phe	Ser	Ala
		20					25					30			
Phe	Val	Ile	Thr	Leu	Ala	Ser	Phe	Gln	Phe	Gly	Tyr	His	Ile	Gly	Cys
		35				40					45				
Val	Asn	Ala	Pro	Gly	Gly	Leu	Ile	Thr	Glu	Trp	Ile	Ile	Gly	Ser	His
	50					55				60					
Lys	Asp	Leu	Phe	Asp	Lys	Glu	Leu	Ser	Arg	Glu	Asn	Ala	Asp	Leu	Ala
65				70					75					80	
Trp	Ser	Val	Ala	Val	Ser	Val	Phe	Ala	Val	Gly	Gly	Met	Ile	Gly	Gly
		85					90					95			
Leu	Ser	Ser	Gly	Trp	Leu	Ala	Asp	Lys	Val	Gly	Arg	Arg	Gly	Ala	Leu
		100					105					110			
Phe	Tyr	Asn	Asn	Leu	Leu	Ala	Leu	Ala	Ala	Ala	Ala	Leu	Met	Gly	Leu
		115					120					125			
Ala	Lys	Ser	Val	Gly	Ala	Tyr	Pro	Met	Val	Ile	Leu	Gly	Arg	Leu	Ile
		130				135					140				

Ile	Gly	Leu	Asn	Cys	Gly	Phe	Ser	Ser	Ala	Leu	Val	Pro	Met	Phe	Leu	145	150	155	160
Thr	Glu	Ile	Ser	Pro	Asn	Asn	Leu	Arg	Gly	Met	Leu	Gly	Ser	Leu	His		165	170	175
Gln	Leu	Leu	Val	Thr	Ile	Ala	Ile	Leu	Val	Ser	Gln	Ile	Phe	Gly	Leu		180	185	190
Pro	His	Leu	Leu	Gly	Thr	Gly	Asp	Arg	Trp	Pro	Leu	Ile	Phe	Ala	Phe		195	200	205
Thr	Val	Val	Pro	Ala	Val	Leu	Gln	Leu	Ala	Leu	Leu	Met	Leu	Cys	Pro		210	215	220
Glu	Ser	Pro	Lys	Tyr	Thr	Met	Ala	Val	Arg	Gly	Gln	Arg	Asn	Glu	Ala		225	230	235
Glu	Ser	Ala	Leu	Lys	Lys	Leu	Arg	Asp	Thr	Glu	Asp	Val	Ser	Thr	Glu		245	250	255
Ile	Glu	Ala	Met	Gln	Glu	Glu	Ala	Thr	Ala	Ala	Gly	Val	Gln	Glu	Lys		260	265	270
Pro	Lys	Met	Gly	Asp	Met	Phe	Lys	Gly	Ala	Leu	Leu	Trp	Pro	Met	Ser		275	280	285
Ile	Ala	Ile	Met	Met	Met	Leu	Ala	Gln	Gln	Leu	Ser	Gly	Ile	Asn	Val		290	295	300
Ala	Met	Phe	Tyr	Ser	Thr	Val	Ile	Phe	Arg	Gly	Ala	Gly	Leu	Thr	Gly		305	310	315
Asn	Glu	Pro	Phe	Tyr	Ala	Thr	Ile	Gly	Met	Gly	Ala	Val	Asn	Val	Ile		325	330	335
Met	Thr	Leu	Ile	Ser	Val	Trp	Leu	Val	Asp	His	Pro	Lys	Phe	Gly	Arg		340	345	350
Arg	Ser	Leu	Leu	Leu	Ala	Gly	Leu	Thr	Gly	Met	Phe	Val	Ser	Thr	Leu		355	360	365
Leu	Leu	Val	Gly	Ala	Leu	Thr	Ile	Gln	Asn	Ser	Gly	Gly	Asp	Lys	Trp		370	375	380
Ala	Ser	Tyr	Ser	Ala	Ile	Gly	Phe	Val	Leu	Leu	Phe	Val	Ile	Ser	Phe		385	390	395
Ala	Thr	Gly	Pro	Gly	Ala	Ile	Pro	Trp	Phe	Phe	Val	Ser	Glu	Ile	Phe		405	410	415
Asp	Ser	Ser	Ala	Arg	Gly	Asn	Ala	Asn	Ser	Ile	Ala	Val	Met	Val	Asn		420	425	430
Trp	Ala	Ala	Asn	Leu	Leu	Val	Gly	Leu	Thr	Phe	Leu	Pro	Ile	Asn	Asn		435	440	445
Leu	Met	Gln	Gln	Tyr	Ser	Phe	Phe	Ile	Phe	Ser	Gly	Phe	Leu	Ala	Phe		450	455	460
Phe	Ile	Phe	Tyr	Thr	Trp	Lys	Phe	Val	Pro	Glu	Thr	Lys	Gly	Lys	Ser		465	470	475
Ile	Glu	Gln	Ile	Gln	Ala	Glu	Phe	Glu	Lys	Arg	Lys						485	490	

<210> 209

<211> 22

<212> PRT

<213> Caenorhabditis elegans

<400> 209

Arg	Asn	Glu	Ala	Glu	Ser	Ala	Leu	Lys	Lys	Leu	Arg	Asp	Thr	Glu	Asp	1	5	10	15
Val	Ser	Thr	Glu	Ile	Glu												20		

<210> 210

<211> 28
 <212> DNA
 <213> *Caenorhabditis elegans*

<400> 210
 tctcgttggt tgccgtcgga tgtctgcc

28

<210> 211
 <211> 223
 <212> PRT
 <213> *Ascoris suum*

<400> 211
 Ala Lys Asn Asn Gly Glu Phe Val Arg Cys Val His Ser Val Gly Gln
 1 5 10 15
 Pro Lys Pro Val Ala Thr Lys Val Ile Asn His Trp Pro Cys Asn Pro
 20 25 30
 Glu Lys Thr Ile Ile Ala His Arg Pro Ala Glu Arg Glu Ile Trp Ser
 35 40 45
 Phe Gly Ser Gly Tyr Gly Gly Asn Ser Leu Leu Gly Lys Lys Cys Phe
 50 55 60
 Ala Leu Arg Ile Ala Met Asn Ile Gly Tyr Asp Glu Gly Trp Met Ala
 65 70 75 80
 Glu His Met Leu Ile Met Gly Val Thr Ser Pro Lys Gly Glu Glu Arg
 85 90 95
 Phe Val Ala Ala Ala Phe Pro Ser Ala Cys Gly Lys Thr Asn Leu Ala
 100 105 110
 Met Leu Glu Pro Thr Ile Pro Gly Trp Lys Val Arg Val Ile Gly Asp
 115 120 125
 Asp Ile Ala Trp Met Lys Phe Gly Ala Asp Gly Arg Leu Tyr Ala Ile
 130 135 140
 Asn Pro Glu Tyr Gly Phe Phe Gly Val Ala Pro Gly Thr Ser His Lys
 145 150 155 160
 Thr Asn Pro Met Ala Met Ala Ser Phe Gln Glu Asn Thr Ile Phe Thr
 165 170 175
 Asn Val Ala Glu Thr Ala Asp Gly Glu Tyr Phe Trp Glu Gly Leu Glu
 180 185 190
 His Glu Val Lys Asn Pro Lys Val Asp Met Ile Asn Trp Leu Gly Glu
 195 200 205
 Pro Trp His Ile Gly Asp Glu Ser Lys Ala Ala His Pro Asn Ser
 210 215 220

<210> 212
 <211> 176
 <212> PRT
 <213> *Caenorhabditis elegans* or *Ascoris suum*

<400> 212
 Ala Asn Phe Val Arg Cys His Ser Val Gly Pro Pro Val Val Ile Asn
 1 5 10 15
 His Trp Pro Cys Asn Pro Glu Ile Ala His Arg Pro Glu Arg Glu Ile
 20 25 30
 Trp Ser Phe Gly Ser Gly Tyr Gly Gly Asn Ser Leu Leu Gly Lys Lys
 35 40 45
 Cys Phe Ala Leu Arg Ile Ala Asn Ile Asp Glu Gly Trp Met Ala Glu
 50 55 60
 His Met Leu Ile Met Gly Val Thr Pro Gly Glu Phe Ala Ala Ala Phe
 65 70 75 80

Pro	Ser	Ala	Cys	Gly	Lys	Thr	Asn	Leu	Ala	Met	Leu	Glu	Pro	Thr	Pro
			85						90					95	
Gly	Trp	Lys	Val	Arg	Gly	Asp	Asp	Ile	Ala	Trp	Met	Lys	Phe	Gly	Asp
		100						105					110		
Gly	Arg	Leu	Tyr	Ala	Ile	Asn	Pro	Glu	Gly	Phe	Phe	Gly	Val	Ala	Pro
		115					120					125			
Gly	Thr	Ser	Lys	Thr	Asn	Pro	Met	Ala	Ala	Phe	Gln	Asn	Ile	Phe	Thr
	130					135					140				
Asn	Val	Ala	Glu	Thr	Ala	Gly	Glu	Tyr	Phe	Trp	Glu	Gly	Leu	Glu	Glu
145					150					155					160
Val	Asp	Trp	Leu	Gly	Glu	Trp	His	Ile	Gly	Ala	Ala	His	Pro	Asn	Ser
			165						170					175	

<210> 213
 <211> 223
 <212> PRT
 <213> Caenorhabditis elegans

<400> 213															
Ala	Leu	Gly	Asn	Gln	Asp	Phe	Val	Arg	Cys	Ile	His	Ser	Val	Gly	Leu
1			5						10					15	
Pro	Arg	Pro	Val	Lys	Gln	Arg	Val	Ile	Asn	His	Trp	Pro	Cys	Asn	Pro
			20					25					30		
Glu	Arg	Val	Leu	Ile	Ala	His	Arg	Pro	Pro	Glu	Arg	Glu	Ile	Trp	Ser
		35					40					45			
Phe	Gly	Ser	Gly	Tyr	Gly	Gly	Asn	Ser	Leu	Leu	Gly	Lys	Lys	Cys	Phe
	50					55					60				
Ala	Leu	Arg	Ile	Ala	Ser	Asn	Ile	Ala	Lys	Asp	Glu	Gly	Trp	Met	Ala
65					70				75						80
Glu	His	Met	Leu	Ile	Met	Gly	Val	Thr	Arg	Pro	Cys	Gly	Arg	Glu	His
			85						90					95	
Phe	Ile	Ala	Ala	Ala	Phe	Pro	Ser	Ala	Cys	Gly	Lys	Thr	Asn	Leu	Ala
			100					105					110		
Met	Leu	Glu	Pro	Thr	Leu	Pro	Gly	Trp	Lys	Val	Arg	Cys	Val	Gly	Asp
			115				120					125			
Asp	Ile	Ala	Trp	Met	Lys	Phe	Gly	Glu	Asp	Gly	Arg	Leu	Tyr	Ala	Ile
	130					135					140				
Asn	Pro	Glu	Ala	Gly	Phe	Gly	Val	Ala	Pro	Gly	Thr	Ser	Asn	Lys	
145					150				155					160	
Thr	Asn	Pro	Met	Ala	Val	Ala	Thr	Phe	Gln	Lys	Asn	Ser	Ile	Phe	Thr
			165						170					175	
Asn	Val	Ala	Glu	Thr	Ala	Asn	Gly	Glu	Tyr	Phe	Trp	Glu	Gly	Leu	Glu
			180					185					190		
Asp	Glu	Ile	Ala	Asp	Lys	Asn	Val	Asp	Ile	Thr	Thr	Trp	Leu	Gly	Glu
		195				200						205			
Lys	Trp	His	Ile	Gly	Glu	Pro	Gly	Val	Ala	Ala	His	Pro	Asn	Ser	
	210						215				220				

<210> 214
 <211> 173
 <212> PRT
 <213> Ascoris suum

<400> 214															
Lys	Gly	Asp	Phe	Val	Ser	Leu	Pro	Lys	His	Val	Gln	Arg	Phe	Val	Ala
1				5					10					15	
Glu	Lys	Ala	Glu	Leu	Met	Lys	Pro	Ser	Ala	Ile	Phe	Ile	Cys	Asp	Gly

Asp Pro Lys Asp Val Ala Arg Val Glu Ser Lys Thr Trp Met Val Thr
 65 70 75 80
 Lys Asn Lys Tyr Asp Thr Val Thr His Thr Lys Glu Gly Val Glu Pro
 85 90 95
 Ile Met Gly His Trp Leu Ala Pro Glu Asp Leu Ala Thr Glu Leu Asp
 100 105 110
 Ser Arg Phe Pro Gly Cys Met Ala Gly Arg Ile Met Tyr Val Ile Pro
 115 120 125
 Phe Ser Met Gly Pro Val Gly Gly Pro Leu Ser Lys Ile Gly Ile Gln
 130 135 140
 Leu Thr Asp Ser Asn Tyr Val Val Leu Ser Met Arg Ile Met Thr Arg
 145 150 155 160
 Val Asn Asn Asp Val Trp Asp Ala Leu Gly Asn Gln Asp
 165 170

<210> 217
 <211> 107
 <212> PRT
 <213> Ascoris suum

<400> 217
 Arg Phe Thr Ala Pro Ala Gly Gln Cys Pro Ile Ile His Pro Asp Trp
 1 5 10 15
 Glu Lys Pro Glu Gly Val Pro Ile Asp Ala Ile Ile Phe Gly Gly Arg
 20 25 30
 Arg Pro Glu Gly Val Pro Leu Val Phe Glu Ser Arg Ser Trp Val His
 35 40 45
 Gly Ile Phe Val Gly Ala Cys Val Lys Ser Glu Ala Thr Ala Ala Ala
 50 55 60
 Glu His Thr Gly Lys Gln Val Met His Asp Pro Met Ala Met Arg Pro
 65 70 75 80
 Phe Met Gly Tyr Asn Phe Gly Arg Tyr Met Arg His Trp Met Lys Leu
 85 90 95
 Gly Gln Pro Pro His Lys Val Pro Lys Ile Phe
 100 105

<210> 218
 <211> 77
 <212> PRT
 <213> Caenorhabditis elegans or Ascoris suum

<400> 218
 Arg Phe Ala Pro Ala Gln Cys Pro Ile Ile His Pro Asp Trp Glu Pro
 1 5 10 15
 Gly Val Pro Ile Ala Ile Ile Phe Gly Gly Arg Arg Pro Gly Val Pro
 20 25 30
 Leu Glu Ser Trp His Gly Phe Gly Cys Lys Ser Glu Ala Thr Ala Ala
 35 40 45
 Ala Glu Thr Gly Lys Val Met His Asp Pro Met Ala Met Arg Pro Phe
 50 55 60
 Met Gly Tyr Asn Phe Gly Tyr His Trp Leu Lys Val Phe
 65 70 75

<210> 219
 <211> 107
 <212> PRT

<213> *Caenorhabditis elegans*

<400> 219

Arg	Phe	Ala	Ala	Pro	Ala	Asn	Gln	Cys	Pro	Ile	Ile	His	Pro	Asp	Trp
1				5					10					15	
Glu	Ser	Pro	Gln	Gly	Val	Pro	Ile	Glu	Ala	Ile	Ile	Phe	Gly	Gly	Arg
			20					25					30		
Arg	Pro	Gln	Gly	Val	Pro	Leu	Ile	Tyr	Glu	Thr	Asn	Ser	Trp	Glu	His
		35				40						45			
Gly	Val	Phe	Thr	Gly	Ser	Cys	Leu	Lys	Ser	Glu	Ala	Thr	Ala	Ala	Ala
	50				55						60				
Glu	Phe	Thr	Gly	Lys	Thr	Val	Met	His	Asp	Pro	Met	Ala	Met	Arg	Pro
65					70				75					80	
Phe	Met	Gly	Tyr	Asn	Phe	Gly	Lys	Tyr	Leu	Gln	His	Trp	Leu	Asp	Leu
			85					90						95	
Lys	Thr	Asp	Ser	Arg	Lys	Val	Ile	Asp	Phe	Phe					
			100					105							

<210> 220

<211> 116

<212> PRT

<213> *Ascoris suum*

<400> 220

Val	Pro	Lys	Ile	Phe	His	Val	Asn	Trp	Phe	Arg	Gln	Ser	Ala	Asp	His
1				5					10					15	
Lys	Phe	Leu	Trp	Pro	Gly	Tyr	Gly	Asp	Asn	Ile	Arg	Val	Ile	Asp	Trp
		20						25					30		
Ile	Leu	Arg	Arg	Cys	Ser	Gly	Asp	Ala	Thr	Ile	Ala	Glu	Glu	Thr	Pro
	35					40						45			
Ile	Gly	Phe	Ile	Pro	Lys	Lys	Gly	Thr	Ile	Asn	Leu	Glu	Gly	Leu	Pro
	50				55					60					
Asn	Val	Asn	Trp	Asp	Glu	Leu	Met	Ser	Ile	Pro	Lys	Ser	Tyr	Trp	Leu
65					70				75					80	
Glu	Asp	Met	Val	Glu	Thr	Lys	Thr	Phe	Phe	Glu	Asn	Gln	Val	Gly	Ser
			85					90						95	
Asp	Leu	Pro	Pro	Glu	Ile	Ala	Lys	Glu	Leu	Glu	Ala	Gln	Thr	Glu	Arg
			100					105						110	
Ile	Lys	Ala	Leu												
			115												

<210> 221

<211> 68

<212> PRT

<213> *Caenorhabditis elegans* or *Ascoris suum*

<400> 221

Pro	Lys	Ile	His	Val	Asn	Trp	Phe	Arg	Lys	Phe	Leu	Trp	Pro	Gly	Gly
1				5					10					15	
Asp	Asn	Ile	Arg	Val	Ile	Asp	Trp	Ile	Arg	Arg	Gly	Ile	Glu	Thr	Pro
			20					25					30		
Ile	Gly	Pro	Lys	Gly	Ile	Asn	Leu	Glu	Gly	Leu	Val	Asn	Trp	Asp	Glu
	35					40						45			
Leu	Met	Ser	Pro	Tyr	Trp	Asp	Glu	Phe	Gln	Val	Gly	Asp	Leu	Pro	Glu
	50					55					60				
Ala	Gln	Arg	Leu												
65															

<210> 222
 <211> 116
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 222
 Met Pro Lys Ile Tyr His Val Asn Trp Phe Arg Lys Asp Ser Asn Asn
 1 5 10 15
 Lys Phe Leu Trp Pro Gly Phe Gly Asp Asn Ile Arg Val Ile Asp Trp
 20 25 30
 Ile Ile Arg Arg Leu Asp Gly Glu Gln Glu Ile Gly Val Glu Thr Pro
 35 40 45
 Ile Gly Thr Val Pro Ala Lys Gly Ser Ile Asn Leu Glu Gly Leu Gly
 50 55 60
 Glu Val Asn Trp Asp Glu Leu Met Ser Val Pro Ala Asp Tyr Trp Lys
 65 70 75 80
 Gln Asp Ala Gln Glu Ile Arg Lys Phe Leu Asp Glu Gln Val Gly Glu
 85 90 95
 Asp Leu Pro Glu Pro Val Arg Ala Glu Met Asp Ala Gln Glu Lys Arg
 100 105 110
 Val Gln Thr Leu
 115

<210> 223
 <211> 36
 <212> PRT
 <213> *Ascoris suum*

<400> 223
 Ser Leu Ser His Phe Lys Asp Asp Asp Phe Ala Val Val Ser Glu Val
 1 5 10 15
 Val Thr His Lys Gln Asn His Ile Pro Val Ile Lys Gly Asp Phe Val
 20 25 30
 Ser Leu Pro Lys
 35

<210> 224
 <211> 15
 <212> PRT
 <213> *Caenorhabditis elegans* or *Ascoris suum*

<400> 224
 Ser Leu Asp Phe Val Val Glu Val Val His Pro Lys Phe Ser Lys
 1 5 10 15

<210> 225
 <211> 36
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 225
 Ser Leu Arg Gln Ile Ser Glu Asp Ala Phe Tyr Val Val Asn Glu Val
 1 5 10 15
 Val Met Lys Arg Leu Gly His Val Pro Ile Leu Lys Val Ile Phe Glu
 20 25 30

Ser Ser Glu Lys
35

<210> 226
<211> 25
<212> PRT
<213> Ascoris suum

<400> 226
Gly Cys Met Ala Gly Arg Thr Met Tyr Val Ile Pro Tyr Ser Met Gly
1 5 10 15
Pro Val Gly Gly Pro Leu Ser Lys Ile
20 25

<210> 227
<211> 9
<212> PRT
<213> Caenorhabditis elegans or Ascoris suum

<400> 227
Gly Cys Arg Val Pro Ser Pro Leu Lys
1 5

<210> 228
<211> 25
<212> PRT
<213> Caenorhabditis elegans

<400> 228
Gly Cys Ser Gly Arg Arg Val Leu Cys Val Cys Pro Cys Ser His Ser
1 5 10 15
Ser Ser Ala Leu Pro Leu Gln Lys Val
20 25

<210> 229
<211> 16
<212> PRT
<213> Ascoris suum

<400> 229
Leu Pro Asn Val Asn Trp Asp Glu Leu Met Ser Ile Pro Lys Ser Tyr
1 5 10 15

<210> 230
<211> 7
<212> PRT
<213> Caenorhabditis elegans or Ascoris suum

<400> 230
Leu Asn Trp Ser Pro Ser Tyr
1 5

<210> 231

<211> 16
 <212> PRT
 <213> Caenorhabditis elegans

<400> 231
 Leu Glu Ser Phe Asn Trp Phe Ser Phe Val Ser Cys Pro Asp Ser Tyr
 1 5 10 15

<210> 232
 <211> 14
 <212> PRT
 <213> Ascoris suum

<400> 232
 Ser Val Cys His Thr Pro Glu Gly Val Lys Pro Met Met Gly
 1 5 10

<210> 233
 <211> 6
 <212> PRT
 <213> Caenorhabditis elegans or Ascoris suum

<400> 233
 Val His Pro Pro Met Gly
 1 5

<210> 234
 <211> 14
 <212> PRT
 <213> Caenorhabditis elegans

<400> 234
 Thr Val Met His Asp Pro Met Ala Met Arg Pro Phe Met Gly
 1 5 10

<210> 235
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 235
 Ser Gly Phe Phe Asp Tyr Gly Ser Phe Ser Glu Ile Met Gln Pro Trp
 1 5 10 15
 Ala Gln Thr Val Val Val Gly Arg Ala Arg Leu Gly Gly Ile Pro Val
 20 25 30
 Gly Val Val Ala Val Glu Thr Arg Thr Val Glu Leu Ser Val Pro Ala
 35 40 45
 Asp Pro Ala Asn Leu Asp Ser Glu Ala Lys Ile Ile Gln Gln Ala Gly
 50 55 60
 Gln Val Trp Phe Pro Asp Ser Ala Phe Lys Thr Tyr Gln Ala Ile Lys
 65 70 75 80
 Asp Phe Asn Arg Glu Gly Leu Pro Leu Met Val Phe Ala Asn Trp Arg
 85 90 95
 Gly Phe Ser Gly Gly Met Lys Asp Met Tyr Asp Gln Val Leu Lys Phe
 100 105 110

Gly	Ala	Tyr	Ile	Val	Asp	Gly	Leu	Arg	Glu	Cys	Ser	Gln	Pro	Val	Met
	115						120					125			
Val	Tyr	Ile	Pro	Pro	Gln	Ala	Glu	Leu	Arg	Gly	Gly	Ser	Trp	Val	Val
	130					135					140				
Ile	Asp	Pro	Thr	Ile	Asn	Pro	Arg	His	Met	Glu	Met	Tyr	Ala	Asp	Arg
145					150					155					160
Glu	Ser	Arg	Gly	Ser	Val	Leu	Glu	Pro	Glu	Gly	Thr	Val	Glu	Ile	Lys
				165					170					175	
Phe	Arg	Lys	Lys	Asp	Leu	Val	Lys	Thr	Met	Arg	Arg	Val	Asp	Pro	Val
			180					185					190		
Tyr	Ile	Arg	Leu	Ala											
			195												

<210> 236
 <211> 109
 <212> PRT
 <213> Caenorhabditis elegans or Homo sapiens

Gly	Asp	Ser	Phe	Glu	Ile	Trp	Ala	Val	Gly	Arg	Ala	Arg	Leu	Gly	Ile
1				5					10					15	
Pro	Gly	Val	Val	Glu	Arg	Val	Pro	Ala	Asp	Pro	Ala	Ser	Gln	Ala	Gly
			20					25					30		
Gln	Val	Trp	Pro	Asp	Ser	Ala	Phe	Lys	Thr	Ala	Ile	Asp	Asn	Glu	Leu
		35					40					45			
Pro	Leu	Met	Ala	Arg	Gly	Phe	Ser	Gly	Gly	Lys	Asp	Met	Tyr	Asp	Val
	50					55					60				
Leu	Lys	Phe	Gly	Ala	Ile	Val	Asp	Leu	Pro	Val	Val	Tyr	Ile	Pro	Glu
65					70					75					80
Leu	Arg	Gly	Gly	Trp	Val	Asp	Ile	Pro	Ala	Asp	Ser	Arg	Gly	Leu	Glu
				85					90					95	
Pro	Val	Ile	Lys	Phe	Arg	Lys	Met	Arg	Asp	Pro	Tyr	Leu			
			100					105							

<210> 237
 <211> 197
 <212> PRT
 <213> Caenorhabditis elegans

Thr	Gly	Ile	Cys	Asp	Thr	Met	Ser	Phe	Asp	Glu	Ile	Cys	Gly	Asp	Trp
1				5					10					15	
Ala	Lys	Ser	Ile	Val	Ala	Gly	Arg	Ala	Arg	Leu	Cys	Gly	Ile	Pro	Ile
			20					25					30		
Gly	Val	Val	Ser	Ser	Glu	Phe	Arg	Asn	Phe	Ser	Thr	Ile	Val	Pro	Ala
		35					40					45			
Asp	Pro	Ala	Ile	Asp	Gly	Ser	Gln	Val	Gln	Asn	Thr	Gln	Arg	Ala	Gly
	50					55					60				
Gln	Val	Trp	Tyr	Pro	Asp	Ser	Ala	Phe	Lys	Thr	Ala	Glu	Ala	Ile	Asn
65					70					75					80
Asp	Leu	Asn	Lys	Glu	Asn	Leu	Pro	Leu	Met	Ile	Ile	Ala	Ser	Leu	Arg
				85					90					95	
Gly	Phe	Ser	Gly	Gly	Gln	Lys	Asp	Met	Tyr	Asp	Met	Val	Leu	Lys	Phe
			100					105					110		
Gly	Ala	Gln	Ile	Val	Asp	Ala	Leu	Ala	Val	Tyr	Asn	Arg	Pro	Val	Ile
		115					120					125			
Val	Tyr	Ile	Pro	Glu	Ala	Gly	Glu	Leu	Arg	Gly	Gly	Ala	Trp	Ala	Val

130		135		140
Leu Asp Ser Lys Ile Arg Pro Glu Phe Ile His Leu Val Ala Asp Glu				
145		150		155
Lys Ser Arg Gly Gly Ile Leu Glu Pro Asn Ala Val Val Gly Ile Lys				
	165		170	175
Phe Arg Lys Pro Met Met Met Glu Met Met Lys Arg Ser Asp Pro Thr				
	180	185		190
Tyr Ser Lys Leu Ser				
195				

<210> 238
 <211> 124
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> (1)...(124)
 <223> Xaa = Any Amino Acid

<400> 238
Val Gly Tyr Pro Val Met Ile Lys Ala Ser Glu Gly Gly Gly Gly Lys
1 5 10 15
Gly Ile Arg Lys Val Asn Asn Ala Asp Asp Phe Pro Asn Leu Phe Arg
20 25 30
Gln Val Gln Ala Glu Val Pro Gly Ser Pro Ile Phe Val Met Arg Leu
35 40 45
Ala Lys Gln Ser Arg His Leu Glu Val Gln Ile Leu Ala Asp Gln Tyr
50 55 60
Gly Asn Ala Ile Ser Leu Phe Gly Arg Asp Cys Ser Val Gln Arg Arg
65 70 75 80
His Gln Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
85 90 95
Val Phe Glu His Met Glu Gln Cys Ala Val Lys Leu Ala Lys Met Val
100 105 110
Gly Tyr Val Ser Ala Gly Thr Val Glu Tyr Leu Tyr
115 120

<210> 239
 <211> 68
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 239
Gly Pro Met Ile Lys Ala Ser Glu Gly Gly Gly Gly Lys Gly Ile Arg
1 5 10 15
Lys Asp Phe Phe Val Glu Val Gly Ser Pro Ile Phe Met Arg His Glu
20 25 30
Val Gln Leu Ala Asp Tyr Asn Ile Ser Arg Asp Cys Ser Gln Arg Arg
35 40 45
Gln Lys Met Ala Val Leu Ala Lys Val Gly Tyr Ser Ala Gly Thr Val
50 55 60
Glu Tyr Leu Tyr
65

<210> 240

<211> 124
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 240
 Ile Gly Phe Pro Leu Met Ile Lys Ala Ser Glu Gly Gly Gly Gly Lys
 1 5 10 15
 Gly Ile Arg Lys Cys Thr Lys Val Glu Asp Phe Lys Ser Met Phe Glu
 20 25 30
 Glu Val Ala Gln Glu Val Gln Gly Ser Pro Ile Phe Leu Met Lys Cys
 35 40 45
 Val Asp Gly Ala Arg His Ile Glu Val Gln Leu Leu Ala Asp Arg Tyr
 50 55 60
 Glu Asn Val Ile Ser Val Tyr Thr Arg Asp Cys Ser Ile Gln Arg Arg
 65 70 75 80
 Cys Gln Lys Ile Ile Glu Glu Ala Pro Ala Ile Ile Ala Ser Ser His
 85 90 95
 Ile Arg Lys Ser Met Gln Glu Asp Ala Val Arg Leu Ala Lys Tyr Val
 100 105 110
 Gly Tyr Glu Ser Ala Gly Thr Val Glu Tyr Leu Tyr
 115 120

<210> 241
 <211> 116
 <212> PRT
 <213> Rat

<400> 241
 Lys Glu Glu Gly Leu Gly Ala Glu Asn Leu Arg Gly Ser Gly Met Ile
 1 5 10 15
 Ala Gly Glu Ser Ser Leu Ala Tyr Asp Glu Ile Ile Thr Ile Ser Leu
 20 25 30
 Val Thr Cys Arg Ala Ile Gly Ile Gly Ala Tyr Leu Val Arg Leu Gly
 35 40 45
 Gln Arg Thr Ile Gln Val Glu Asn Ser His Leu Ile Leu Thr Gly Ala
 50 55 60
 Gly Ala Leu Asn Lys Val Leu Gly Arg Glu Val Tyr Thr Ser Asn Asn
 65 70 75 80
 Gln Leu Gly Gly Ile Gln Ile Met His Asn Asn Gly Val Thr His Cys
 85 90 95
 Thr Val Cys Asp Asp Phe Glu Gly Val Phe Thr Val Leu His Trp Leu
 100 105 110
 Ser Tyr Met Pro
 115

<210> 242
 <211> 65
 <212> PRT
 <213> *Caenorhabditis elegans* or Rat

<400> 242
 Lys Glu Gly Glu Asn Leu Gly Ser Gly Ile Ala Gly Glu Ala Tyr Glu
 1 5 10 15
 Thr Val Thr Arg Gly Ile Gly Ala Tyr Arg Leu Arg Gln Ser His Leu
 20 25 30
 Ile Leu Thr Gly Ala Leu Asn Leu Gly Val Tyr Thr Ser Asn Asn Gln
 35 40 45

Leu Gly Gly Met Asn Gly Val Thr His Val Asp Glu Gly Val Trp Ser
 50 55 60
 Pro
 65

<210> 243
 <211> 116
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 243
 Lys Asn Glu Lys Ile Gly Val Glu Asn Leu Gln Gly Ser Gly Leu Ile
 1 5 10 15
 Ala Gly Glu Thr Ala Arg Ala Tyr Ala Glu Val Pro Thr Tyr Cys Tyr
 20 25 30
 Val Thr Gly Arg Ser Val Gly Ile Gly Ala Tyr Thr Ala Arg Leu Ala
 35 40 45
 His Arg Ile Val Gln His Lys Gln Ser His Leu Ile Leu Thr Gly Tyr
 50 55 60
 Glu Ala Leu Asn Thr Leu Leu Gly Lys Lys Val Tyr Thr Ser Asn Asn
 65 70 75 80
 Gln Leu Gly Gly Pro Glu Val Met Phe Arg Asn Gly Val Thr His Ala
 85 90 95
 Val Val Asp Asn Asp Leu Glu Gly Ile Ala Lys Val Ile Arg Trp Met
 100 105 110
 Ser Phe Leu Pro
 115

<210> 244
 <211> 119
 <212> PRT
 <213> *Homo sapiens*

<400> 244
 His Val Ile Ala Ala Arg Ile Thr Ser Glu Asn Pro Asp Glu Gly Phe
 1 5 10 15
 Lys Pro Ser Ser Gly Thr Val Gln Glu Leu Asn Phe Arg Ser Asn Lys
 20 25 30
 Asn Val Trp Gly Tyr Phe Ser Val Ala Ala Gly Gly Leu His Glu
 35 40 45
 Phe Ala Asp Ser Gln Phe Gly His Cys Phe Ser Trp Gly Glu Asn Arg
 50 55 60
 Glu Glu Ala Ile Ser Asn Met Val Val Ala Leu Lys Glu Leu Ser Ile
 65 70 75 80
 Arg Gly Asp Phe Arg Thr Thr Val Glu Tyr Leu Ile Lys Leu Leu Glu
 85 90 95
 Thr Glu Ser Phe Gln Leu Asn Arg Ile Asp Thr Gly Trp Leu Asp Arg
 100 105 110
 Leu Ile Ala Glu Lys Val Gln
 115

<210> 245
 <211> 59
 <212> PRT
 <213> *Caenorhabditis elegans* or *Homo sapiens*

<400> 245
 His Ile Ala Ala Arg Ile Thr Glu Asn Pro Asp Phe Pro Ser Gly Val
 1 5 10 15
 Glu Asn Phe Ser Trp Tyr Phe Ser Val His Phe Ala Asp Ser Gln Phe
 20 25 30
 Gly His Phe Gly Arg Glu Ala Met Leu Lys Ile Arg Phe Thr Val Tyr
 35 40 45
 Leu Leu Phe Asn Thr Trp Leu Asp Ile Ala Lys
 50 55

<210> 246
 <211> 119
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 246
 His Ala Ile Ala Ala Arg Ile Thr Cys Glu Asn Pro Asp Asp Ser Phe
 1 5 10 15
 Arg Pro Ser Thr Gly Lys Val Tyr Glu Ile Asn Phe Pro Ser Ser Gln
 20 25 30
 Asp Ala Trp Ala Tyr Phe Ser Val Gly Arg Gly Ser Ser Val His Gln
 35 40 45
 Phe Ala Asp Ser Gln Phe Gly His Ile Phe Thr Arg Gly Thr Ser Arg
 50 55 60
 Thr Glu Ala Met Asn Thr Met Cys Ser Thr Leu Lys His Met Thr Ile
 65 70 75 80
 Arg Ser Ser Phe Pro Thr Gln Val Asn Tyr Leu Val Asp Leu Met His
 85 90 95
 Asp Ala Asp Phe Ile Asn Asn Ala Phe Asn Thr Gln Trp Leu Asp Lys
 100 105 110
 Arg Ile Ala Met Lys Ile Lys
 115

<210> 247
 <211> 90
 <212> PRT
 <213> Rat

<400> 247
 Pro Gly Gly Ala Asn Asn Asn Asn Tyr Ala Asn Val Glu Leu Ile Leu
 1 5 10 15
 Asp Ile Ala Lys Arg Ile Pro Val Gln Ala Val Trp Ala Gly Trp Gly
 20 25 30
 His Ala Ser Glu Asn Pro Lys Leu Pro Glu Leu Leu Leu Lys Asn Gly
 35 40 45
 Ile Ala Phe Met Gly Pro Pro Ser Gln Ala Met Trp Ala Leu Gly Asp
 50 55 60
 Lys Ile Ala Ser Ser Ile Val Ala Gln Thr Ala Gly Ile Pro Thr Leu
 65 70 75 80
 Pro Trp Ser Gly Ser Gly Leu Arg Val Asp
 85 90

<210> 248
 <211> 55
 <212> PRT
 <213> *Caenorhabditis elegans* or Rat

<400> 248
 Pro Gly Asn Asn Asn Ala Asn Val Ile Leu Ala Val Ala Val Trp Ala
 1 5 10 15
 Gly Trp Gly His Ala Ser Glu Asn Pro Leu Pro Leu Ile Ala Phe Gly
 20 25 30
 Pro Pro Ala Met Leu Gly Asp Lys Ile Ala Ser Ile Ala Gln Thr Gly
 35 40 45
 Pro Thr Trp Ser Gly Ser Gly
 50 55

<210> 249
 <211> 90
 <212> PRT
 <213> Caenorhabditis elegans

<400> 249
 Pro Ser Gly Thr Asn Lys Asn Asn Phe Ala Asn Val Asp Glu Ile Leu
 1 5 10 15
 Lys His Ala Ile Lys Tyr Glu Val Asp Ala Val Trp Ala Gly Trp Gly
 20 25 30
 His Ala Ser Glu Asn Pro Asp Leu Pro Arg Arg Leu Asn Asp His Asn
 35 40 45
 Ile Ala Phe Ile Gly Pro Pro Ala Ser Ala Met Phe Ser Leu Gly Asp
 50 55 60
 Lys Ile Ala Ser Thr Ile Ile Ala Gln Thr Val Gly Val Pro Thr Val
 65 70 75 80
 Ala Trp Ser Gly Ser Gly Ile Thr Met Glu
 85 90

<210> 250
 <211> 67
 <212> PRT
 <213> Caenorhabditis elegans

<400> 250
 Val Ile Lys Asn Leu Gly Tyr Met Val Asp Asn His Gly Phe Val Pro
 1 5 10 15
 Asn Gly Gly Arg Val Tyr Tyr Leu Thr Arg Ser Gln Pro Pro Leu Leu
 20 25 30
 Thr Pro Met Val Tyr Glu Tyr Tyr Met Ser Thr Gly Asp Leu Asp Phe
 35 40 45
 Val Met Glu Ile Leu Pro Thr Leu Asp Lys Glu Tyr Glu Phe Trp Ile
 50 55 60
 Lys Asn Arg
 65

<210> 251
 <211> 36
 <212> PRT
 <213> Caenorhabditis elegans

<400> 251
 Ile Asn Gly Phe Val Pro Asn Gly Gly Arg Val Tyr Tyr Leu Arg Ser
 1 5 10 15
 Gln Pro Pro Pro Met Val Tyr Glu Tyr Tyr Thr Asp Val Pro Lys Glu
 20 25 30

Tyr Phe Trp Arg
35

<210> 252
<211> 67
<212> PRT
<213> Caenorhabditis elegans

<400> 252
Met Ile Leu Asn Phe Ala His Ile Ile Glu Thr Tyr Gly Phe Val Pro
1 5 10 15
Asn Gly Gly Arg Val Tyr Tyr Leu Arg Arg Ser Gln Pro Pro Phe Phe
20 25 30
Ala Pro Met Val Tyr Glu Tyr Tyr Leu Ala Thr Gln Asp Ile Gln Leu
35 40 45
Val Ala Asp Leu Ile Pro Val Ile Glu Lys Glu Tyr Thr Phe Trp Ser
50 55 60
Glu Arg Arg
65

<210> 253
<211> 92
<212> PRT
<213> Caenorhabditis elegans

<400> 253
Met Asp Ser Ile Arg Thr Trp Ser Ile Ile Pro Ala Asp Leu Asn Ala
1 5 10 15
Phe Met Cys Ala Asn Ala Arg Ile Leu Ala Ser Leu Tyr Glu Ile Ala
20 25 30
Gly Asp Phe Lys Lys Val Lys Val Phe Glu Gln Arg Tyr Thr Trp Ala
35 40 45
Lys Arg Glu Met Arg Glu Leu His Trp Asn Glu Thr Asp Gly Ile Trp
50 55 60
Tyr Asp Tyr Asp Ile Glu Leu Lys Thr His Ser Asn Gln Tyr Tyr Val
65 70 75 80
Ser Asn Ala Val Pro Leu Tyr Ala Lys Cys Tyr Asp
85 90

<210> 254
<211> 32
<212> PRT
<213> Caenorhabditis elegans

<400> 254
Ile Thr Ile Pro Asp Leu Asn Ala Phe Cys Asn Ile Tyr Gly Lys Arg
1 5 10 15
Thr Trp Tyr Asp Tyr Thr His Ser Asn Ala Val Pro Leu Cys Tyr Asp
20 25 30

<210> 255
<211> 92
<212> PRT
<213> Caenorhabditis elegans

<400> 255
 Ile Ser Thr Ile Glu Thr Thr Asn Ile Val Pro Val Asp Leu Asn Ala
 1 5 10 15
 Phe Leu Cys Tyr Asn Met Asn Ile Met Gln Leu Phe Tyr Lys Leu Thr
 20 25 30
 Gly Asn Pro Leu Lys His Leu Glu Trp Ser Ser Arg Phe Thr Asn Phe
 35 40 45
 Arg Glu Ala Phe Thr Lys Val Phe Tyr Val Pro Ala Arg Lys Gly Trp
 50 55 60
 Tyr Asp Tyr Asn Leu Arg Thr Leu Thr His Asn Thr Asp Phe Phe Ala
 65 70 75 80
 Ser Asn Ala Val Pro Leu Phe Ser Gln Cys Tyr Asp
 85 90

<210> 256
 <211> 102
 <212> PRT
 <213> Caenorhabditis elegans

<400> 256
 Val His Asp Tyr Leu Glu Arg Gln Gly Leu Leu Lys Tyr Thr Lys Gly
 1 5 10 15
 Leu Pro Thr Ser Leu Ala Met Ser Ser Thr Gln Gln Trp Asp Lys Glu
 20 25 30
 Asn Ala Trp Pro Pro Met Ile His Met Val Ile Glu Gly Phe Arg Thr
 35 40 45
 Thr Gly Asp Ile Lys Leu Met Lys Val Ala Glu Lys Met Ala Thr Ser
 50 55 60
 Trp Leu Thr Gly Thr Tyr Gln Ser Phe Ile Arg Thr His Ala Met Phe
 65 70 75 80
 Glu Lys Tyr Asn Val Thr Pro His Thr Glu Glu Thr Ser Gly Gly Gly
 85 90 95
 Gly Gly Glu Tyr Glu Val
 100

<210> 257
 <211> 37
 <212> PRT
 <213> Caenorhabditis elegans

<400> 257
 Val Gly Gly Pro Thr Ser Gln Gln Trp Asp Asn Trp Pro Met His Met
 1 5 10 15
 Ile Glu Gly Arg Leu Ala Ala Trp Leu Gln Phe Met Glu Lys Tyr Asn
 20 25 30
 Val Gly Gly Glu Val
 35

<210> 258
 <211> 102
 <212> PRT
 <213> Caenorhabditis elegans

<400> 258
 Val Tyr Asn Glu Met Gln Asn Ser Gly Ala Phe Ser Ile Pro Gly Gly
 1 5 10 15

Ile	Pro	Thr	Ser	Met	Asn	Glu	Glu	Thr	Asn	Gln	Gln	Trp	Asp	Phe	Pro
			20					25					30		
Asn	Gly	Trp	Ser	Pro	Met	Asn	His	Met	Ile	Ile	Glu	Gly	Leu	Arg	Lys
		35					40					45			
Ser	Asn	Asn	Pro	Ile	Leu	Gln	Gln	Lys	Ala	Phe	Thr	Leu	Ala	Glu	Lys
	50					55					60				
Trp	Leu	Glu	Thr	Asn	Met	Gln	Thr	Phe	Asn	Val	Ser	Asp	Glu	Met	Trp
65					70					75					80
Glu	Lys	Tyr	Asn	Val	Lys	Glu	Pro	Leu	Gly	Lys	Leu	Ala	Thr	Gly	Gly
			85						90					95	
Glu	Tyr	Glu	Val	Gln	Val										
			100												

<210> 259
 <211> 58
 <212> PRT
 <213> Caenorhabditis elegans

Tyr	Gln	Tyr	Lys	Ala	Lys	Leu	Lys	Val	Pro	Arg	Pro	Glu	Ser	Tyr	Arg
1			5						10				15		
Glu	Asp	Ser	Glu	Leu	Ala	Glu	His	Leu	Gln	Thr	Glu	Ala	Glu	Lys	Ile
		20					25					30			
Gln	Met	Trp	Ser	Glu	Ile	Ala	Ser	Ala	Ala	Glu	Thr	Gly	Trp	Asp	Phe
	35					40						45			
Ser	Thr	Arg	Trp	Phe	Ser	Gln	Asn	Gly	Asp						
	50					55									

<210> 260
 <211> 29
 <212> PRT
 <213> Caenorhabditis elegans

Gln	Tyr	Pro	Arg	Pro	Glu	Ser	Arg	Glu	Asp	Ala	Glu	His	Thr	Lys	Gln
1			5						10					15	
Ser	Ala	Ala	Glu	Gly	Trp	Asp	Phe	Ser	Arg	Trp	Phe	Asp			
		20						25							

<210> 261
 <211> 58
 <212> PRT
 <213> Caenorhabditis elegans

Phe	Gln	Tyr	Arg	Thr	Glu	Ala	Glu	Thr	Pro	Arg	Pro	Glu	Ser	Phe	Arg
1			5						10					15	
Glu	Asp	Val	Leu	Ser	Ala	Glu	His	Phe	Thr	Thr	Lys	Asp	Arg	Lys	Lys
		20					25					30			
Gln	Phe	Phe	Lys	Asp	Leu	Gly	Ser	Ala	Ala	Glu	Ser	Gly	Trp	Asp	Phe
	35					40						45			
Ser	Ser	Arg	Trp	Phe	Lys	Asn	His	Lys	Asp						
	50					55									

<210> 262

<211> 21
 <212> PRT
 <213> Caenorhabditis elegans

 <400> 262
 Gln Thr Gly Phe Gly Trp Thr Asn Gly Val Ile Leu Asp Leu Leu Asp
 1 5 10 15
 Lys Tyr Gly Asp Gln
 20

 <210> 263
 <211> 13
 <212> PRT
 <213> Caenorhabditis elegans

 <400> 263
 Gln Gly Phe Gly Trp Thr Asn Gly Leu Asp Leu Tyr Asp
 1 5 10

 <210> 264
 <211> 21
 <212> PRT
 <213> Caenorhabditis elegans

 <400> 264
 Gln Ala Gly Phe Gly Trp Thr Asn Gly Ala Ala Leu Asp Leu Ile Phe
 1 5 10 15
 Thr Tyr Ser Asp Arg
 20

 <210> 265
 <211> 24
 <212> PRT
 <213> Caenorhabditis elegans

 <400> 265
 Ser Ser Ser Thr Ala Ser Lys Phe Ser Phe Ser Leu Ser Asn Ile Thr
 1 5 10 15
 Phe Val Val Phe Ile Leu Tyr Ile
 20

 <210> 266
 <211> 10
 <212> PRT
 <213> Caenorhabditis elegans

 <400> 266
 Ser Ser Ser Phe Ser Val Phe Leu Tyr Ile
 1 5 10

 <210> 267
 <211> 24
 <212> PRT
 <213> Caenorhabditis elegans

<400> 267
 Thr Ser Ser Ser Ser Ser Thr Phe Gly Tyr Ser Asn Ile Leu Thr Leu
 1 5 10 15
 Ile Thr Val Phe Val Leu Tyr Ile
 20

<210> 268
 <211> 7
 <212> PRT
 <213> Caenorhabditis elegans

<400> 268
 Gly Gly Glu Tyr Glu Val Gln
 1 5

<210> 269
 <211> 7
 <212> PRT
 <213> Caenorhabditis elegans

<400> 269
 Gly Gly Glu Tyr Glu Val Gln
 1 5

<210> 270
 <211> 7
 <212> PRT
 <213> Caenorhabditis elegans

<400> 270
 Gly Gly Glu Tyr Glu Val Gln
 1 5

<210> 271
 <211> 18
 <212> PRT
 <213> Caenorhabditis elegans

<400> 271
 Lys Thr His Ser Asn Gln Tyr Tyr Val Ser Asn Ala Val Pro Leu Tyr
 1 5 10 15
 Ala Lys

<210> 272
 <211> 8
 <212> PRT
 <213> Caenorhabditis elegans

<400> 272
 Lys Tyr Tyr Val Ser Pro Tyr Lys
 1 5

<210> 273
 <211> 18
 <212> PRT
 <213> Caenorhabditis elegans

<400> 273
 Lys Phe Thr Ala His Pro Tyr Tyr Val Ser Arg Thr Pro Pro Arg Tyr
 1 5 10 15
 His Lys

<210> 274
 <211> 67
 <212> PRT
 <213> Caenorhabditis elegans

<400> 274
 Val Ile Lys Asn Leu Gly Tyr Met Val Asp Asn His Gly Phe Val Pro
 1 5 10 15
 Asn Gly Gly Arg Val Tyr Tyr Leu Thr Arg Ser Gln Pro Pro Leu Leu
 20 25 30
 Thr Pro Met Val Tyr Glu Tyr Tyr Met Ser Thr Gly Asp Leu Asp Phe
 35 40 45
 Val Met Glu Ile Leu Pro Thr Leu Asp Lys Glu Tyr Glu Phe Trp Ile
 50 55 60
 Lys Asn Arg
 65

<210> 275
 <211> 43
 <212> PRT
 <213> Caenorhabditis elegans

<400> 275
 Ile Asn Leu Met Val Asp Gly Phe Val Pro Asn Gly Gly Arg Val Tyr
 1 5 10 15
 Tyr Leu Arg Ser Gln Pro Pro Leu Met Val Tyr Glu Tyr Thr Asp Phe
 20 25 30
 Val Glu Leu Pro Thr Leu Lys Glu Phe Trp Arg
 35 40

<210> 276
 <211> 67
 <212> PRT
 <213> Caenorhabditis elegans

<400> 276
 Met Ile Arg Asn Leu Ala Ser Met Val Asp Lys Tyr Gly Phe Val Pro
 1 5 10 15
 Asn Gly Gly Arg Val Tyr Tyr Leu Gln Arg Ser Gln Pro Pro Phe Leu
 20 25 30
 Ala Ala Met Val Tyr Glu Leu Tyr Glu Ala Thr Asn Asp Lys Ala Phe
 35 40 45
 Val Ala Glu Leu Leu Pro Thr Leu Lys Glu Leu Asn Phe Trp Asn
 50 55 60
 Glu Lys Arg

<210> 277
 <211> 84
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 277
 Ile Ile Pro Ala Asp Leu Asn Ala Phe Met Cys Ala Asn Ala Arg Ile
 1 5 10 15
 Leu Ala Ser Leu Tyr Glu Ile Ala Gly Asp Phe Lys Lys Val Lys Val
 20 25 30
 Phe Glu Gln Arg Tyr Thr Trp Ala Lys Arg Glu Met Arg Glu Leu His
 35 40 45
 Trp Asn Glu Thr Asp Gly Ile Trp Tyr Asp Tyr Asp Ile Glu Leu Lys
 50 55 60
 Thr His Ser Asn Gln Tyr Tyr Val Ser Asn Ala Val Pro Leu Tyr Ala
 65 70 75 80
 Lys Cys Tyr Asp

<210> 278
 <211> 31
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 278
 Pro Asp Leu Asn Cys Asn Ile Leu Tyr Glu Gly Asp Lys Phe Asn Thr
 1 5 10 15
 Asp Gly Trp Tyr Asp Tyr His Tyr Ser Ala Val Pro Leu Cys Tyr
 20 25 30

<210> 279
 <211> 84
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 279
 Val Leu Pro Val Asp Leu Asn Gly Leu Leu Cys Trp Asn Met Asp Ile
 1 5 10 15
 Met Glu Tyr Leu Tyr Glu Gln Ile Gly Asp Thr Lys Asn Ser Gln Ile
 20 25 30
 Phe Arg Asn Lys Arg Ala Asp Phe Arg Asp Thr Val Gln Asn Val Phe
 35 40 45
 Tyr Asn Arg Thr Asp Gly Thr Trp Tyr Asp Tyr Asn Leu Arg Thr Gln
 50 55 60
 Ser His Asn Pro Arg Phe Tyr Thr Ser Thr Ala Val Pro Leu Phe Thr
 65 70 75 80
 Asn Cys Tyr Asn

<210> 280
 <211> 48
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 280
 Tyr Leu Glu Arg Gln Gly Leu Leu Lys Tyr Thr Lys Gly Leu Pro Thr
 1 5 10 15
 Ser Leu Ala Met Ser Ser Thr Gln Gln Trp Asp Lys Glu Asn Ala Trp
 20 25 30
 Pro Pro Met Ile His Met Val Ile Glu Gly Phe Arg Thr Thr Gly Asp
 35 40 45

<210> 281
 <211> 20
 <212> PRT
 <213> Caenorhabditis elegans

<400> 281
 Gly Tyr Gly Pro Thr Ser Ser Gln Gln Trp Asp Asn Trp Pro His Met
 1 5 10 15
 Ile Glu Gly Arg
 20

<210> 282
 <211> 48
 <212> PRT
 <213> Caenorhabditis elegans

<400> 282
 Phe Phe Gln Lys Met Gly Val Phe Thr Tyr Pro Gly Gly Ile Pro Thr
 1 5 10 15
 Ser Met Ser Gln Glu Ser Asp Gln Gln Trp Asp Phe Pro Asn Gly Trp
 20 25 30
 Ser Pro Asn Asn His Met Ile Ile Glu Gly Leu Arg Lys Ser Ala Asn
 35 40 45

<210> 283
 <211> 18
 <212> PRT
 <213> Caenorhabditis elegans

<400> 283
 Glu Ile Ala Ser Ala Ala Glu Thr Gly Trp Asp Phe Ser Thr Arg Trp
 1 5 10 15
 Phe Ser

<210> 284
 <211> 15
 <212> PRT
 <213> Caenorhabditis elegans

<400> 284
 Ala Ser Ala Ala Glu Gly Trp Asp Phe Ser Thr Arg Trp Phe Ser
 1 5 10 15

<210> 285
 <211> 18

<212> PRT
<213> Caenorhabditis elegans

<400> 285
Asp Leu Ala Ser Ala Ala Glu Ser Gly Trp Asp Phe Ser Thr Arg Trp
1 5 10 15
Phe Ser

<210> 286
<211> 40
<212> PRT
<213> Caenorhabditis elegans

<400> 286
Lys Gln Phe Pro Tyr Tyr Gln Tyr Lys Ala Lys Leu Lys Val Pro Arg
1 5 10 15
Pro Glu Ser Tyr Arg Glu Asp Ser Glu Leu Ala Glu His Leu Gln Thr
20 25 30
Glu Ala Glu Lys Ile Gln Met Trp
35 40

<210> 287
<211> 18
<212> PRT
<213> Caenorhabditis elegans

<400> 287
Lys Phe Tyr Gln Tyr Lys Val Pro Arg Pro Glu Ser Tyr Arg Asp Leu
1 5 10 15
Ala Gln

<210> 288
<211> 40
<212> PRT
<213> Caenorhabditis elegans

<400> 288
Lys Ser Phe Lys Val Tyr Gln Tyr Lys Thr Ala Ser Asn Val Pro Arg
1 5 10 15
Pro Glu Ser Tyr Arg Val Asp Thr Gln Asn Ser Ala Lys Leu Ala Asn
20 25 30
Gly Ala Asp Gln Gln Gln Phe Tyr
35 40

<210> 289
<211> 21
<212> PRT
<213> Caenorhabditis elegans

<400> 289
Gln Thr Gly Phe Gly Trp Thr Asn Gly Val Ile Leu Asp Leu Leu Asp
1 5 10 15
Lys Tyr Gly Asp Gln

<210> 290
 <211> 14
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 290
 Gln Gly Phe Gly Trp Asn Gly Ile Leu Asp Leu Leu Tyr Asp
 1 5 10

<210> 291
 <211> 21
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 291
 Gln Asp Gly Phe Gly Trp Ser Asn Gly Ala Ile Leu Asp Leu Leu Leu
 1 5 10 15
 Thr Tyr Asn Asp Arg
 20

<210> 292
 <211> 27
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 292
 Tyr Gly Asp Gln Phe Ala Ser Ser Ser Thr Ala Ser Lys Phe Ser Phe
 1 5 10 15
 Ser Leu Ser Asn Ile Thr Phe Val Val Phe Ile
 20 25

<210> 293
 <211> 11
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 293
 Tyr Phe Ala Ser Ser Ser Ala Ser Phe Ser Phe
 1 5 10

<210> 294
 <211> 26
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 294
 Tyr Asn Pro Phe Ala Ser Ser Ser Asp Ala Ser Ser Cys Pro Phe Ser
 1 5 10 15
 Thr Asn Ser Val Ile Phe Ser Ile Leu Val
 20 25

<210> 295
<211> 9
<212> PRT
<213> *Caenorhabditis elegans*

<400> 295
Gly Gly Gly Gly Glu Tyr Glu Val Gln
1 5

<210> 296
<211> 7
<212> PRT
<213> *Caenorhabditis elegans*

<400> 296
Gly Gly Gly Glu Tyr Val Gln
1 5

<210> 297
<211> 9
<212> PRT
<213> *Caenorhabditis elegans*

<400> 297
Gly Ser Gly Gly Glu Tyr Asp Val Gln
1 5

<210> 298
<211> 14
<212> PRT
<213> *Caenorhabditis elegans*

<400> 298
Asn Gln Tyr Tyr Val Ser Asn Ala Val Pro Leu Tyr Ala Lys
1 5 10

<210> 299
<211> 7
<212> PRT
<213> *Caenorhabditis elegans*

<400> 299
Asn Tyr Tyr Val Leu Tyr Lys
1 5

<210> 300
<211> 14
<212> PRT
<213> *Caenorhabditis elegans*

<400> 300
Asn His Tyr Tyr Ile Ile Gln Met Val Ser Leu Tyr Thr Lys
1 5 10

<210> 301
 <211> 30
 <212> PRT
 <213> Caenorhabditis elegans

<400> 301
 Asp Gln Phe Ala Ser Ser Ser Thr Ala Ser Lys Phe Ser Phe Ser Leu
 1 5 10 15
 Ser Asn Ile Thr Phe Val Val Phe Ile Leu Tyr Ile Phe Ser
 20 25 30

<210> 302
 <211> 11
 <212> PRT
 <213> Caenorhabditis elegans

<400> 302
 Asp Gln Phe Ser Ser Lys Phe Ser Phe Phe Ser
 1 5 10

<210> 303
 <211> 30
 <212> PRT
 <213> Caenorhabditis elegans

<400> 303
 Asp Gln Phe Val Ile Ser Phe Ile Cys Ser Lys Phe Ser Ser Lys Asn
 1 5 10 15
 Lys Lys Leu Tyr Phe Cys Pro Ser His Phe Ser Leu Phe Ser
 20 25 30

<210> 304
 <211> 9
 <212> PRT
 <213> Caenorhabditis elegans

<220>
 <221> VARIANT
 <222> (1)...(9)
 <223> Xaa = Any Amino Acid

<400> 304
 Gly Trp Asp Xaa Xaa Ile Ala Pro Lys
 1 5

<210> 305
 <211> 62
 <212> PRT
 <213> Mus musculus

<400> 305
 Leu Cys Lys Glu Gly Ile Ser Asp Gly Ala Thr Met Lys Thr Phe Cys
 1 5 10 15
 Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val Leu Glu Asp Asn Asp Tyr
 20 25 30

Gly	Arg	Ala	Val	Asp	Trp	Trp	Gly	Leu	Gly	Val	Val	Met	Tyr	Glu	Met
		35					40					45			
Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	Asn	Gln	Asp	His	Glu	Arg		
	50					55					60				

<210> 306
 <211> 9
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 306
 Gln Ala Leu Thr Gln Met Asn Pro Lys
 1 5

<210> 307
 <211> 11
 <212> PRT
 <213> *Caenorhabditis elegans*

<400> 307
 Gln Ala Leu Thr Gln Cys Val Asp Ser Met Arg
 1 5 10

<210> 308
 <211> 248
 <212> PRT
 <213> *Homo sapiens*

<400> 308
 Ile Phe Arg Thr Ala Val Ser Ser Asn Arg Cys Arg Thr Glu Tyr Gln
 1 5 10 15
 Asn Ile Asp Leu Asp Cys Ala Tyr Ile Thr Asp Arg Ile Ile Ala Ile
 20 25 30
 Gly Tyr Pro Ala Thr Gly Ile Glu Ala Asn Phe Arg Asn Ser Lys Val
 35 40 45
 Gln Thr Gln Gln Phe Leu Thr Arg Arg His Gly Lys Gly Asn Val Lys
 50 55 60
 Val Phe Asn Leu Arg Gly Gly Tyr Tyr Tyr Asp Ala Asp Asn Phe Asp
 65 70 75 80
 Gly Asn Val Ile Cys Phe Asp Met Thr Asp His His Pro Pro Ser Leu
 85 90 95
 Glu Leu Met Ala Pro Phe Cys Arg Glu Ala Lys Glu Trp Leu Glu Ala
 100 105 110
 Asp Asp Lys His Val Ile Ala Val His Cys Lys Ala Gly Lys Gly Arg
 115 120 125
 Thr Gly Val Met Ile Cys Ala Leu Leu Ile Tyr Ile Asn Phe Tyr Pro
 130 135 140
 Ser Pro Arg Gln Ile Leu Asp Tyr Tyr Ser Ile Ile Thr Arg Lys Asn
 145 150 155 160
 Asn Lys Gly Val Thr Ile Pro Ser Gln Arg Arg Tyr Ile Tyr Tyr Tyr
 165 170 175
 His Lys Leu Arg Glu Arg Glu Leu Asn Tyr Leu Pro Leu Arg Met Gln
 180 185 190
 Leu Ile Gly Val Tyr Val Glu Arg Pro Pro Lys Thr Trp Gly Gly Gly
 195 200 205
 Ser Lys Ile Lys Val Glu Val Gly Asn Gly Ser Thr Ile Leu Phe Lys

210		215		220
Pro Asp Pro Leu Ile Ile Ser Lys Ser Asn His Gln Arg Glu Arg Ala				
225		230	235	240
Thr Trp Leu Asn Asn Cys Asp Thr				
	245			

<210> 309
 <211> 249
 <212> PRT
 <213> Caenorhabditis elegans

<400> 309

Ile Ile Lys Glu Ile Val Ser Arg Asn Lys Arg Arg Tyr Gln Glu Asp				
1	5	10	15	
Gly Phe Asp Leu Asp Leu Thr Tyr Ile Tyr Pro Asn Ile Ile Ala Met				
	20	25	30	
Gly Phe Pro Ala Glu Arg Leu Glu Gly Val Tyr Arg Asn Asn Ile Asp				
	35	40	45	
Asp Val Val Arg Phe Leu Asp Ser Lys His Lys Asn His Tyr Lys Ile				
	50	55	60	
Tyr Asn Leu Cys Ala Glu Arg His Tyr Asp Thr Ala Lys Phe Asn Cys				
65	70	75	80	
Arg Val Ala Gln Tyr Pro Phe Glu Asp His Asn Pro Pro Gln Leu Glu				
	85	90	95	
Leu Ile Lys Pro Phe Cys Glu Asp Leu Asp Gln Trp Leu Ser Glu Asp				
	100	105	110	
Asp Asn His Val Ala Ala Ile His Cys Lys Ala Gly Lys Gly Arg Thr				
	115	120	125	
Gly Val Met Ile Cys Ala Tyr Leu Leu His Arg Gly Lys Phe Leu Lys				
	130	135	140	
Ala Gln Glu Ala Leu Asp Phe Tyr Gly Glu Val Arg Thr Arg Asp Lys				
145	150	155	160	
Lys Gly Val Thr Ile Pro Ser Gln Arg Arg Tyr Val Tyr Tyr Tyr Ser				
	165	170	175	
Tyr Leu Leu Lys Asn His Leu Asp Tyr Arg Pro Val Ala Leu Leu Phe				
	180	185	190	
His Lys Met Met Phe Glu Thr Ile Pro Met Phe Ser Gly Gly Thr Cys				
	195	200	205	
Asn Pro Gln Phe Val Val Cys Gln Leu Lys Val Lys Ile Tyr Ser Ser				
	210	215	220	
Asn Ser Gly Pro Thr Arg Arg Glu Asp Lys Phe Asn Tyr Phe Glu Phe				
225	230	235	240	
Pro Gln Pro Leu Pro Val Cys Gly Asp				
	245			

<210> 310
 <211> 962
 <212> PRT
 <213> Caenorhabditis elegans

<400> 310

Met Val Thr Pro Pro Pro Asp Val Pro Ser Thr Ser Thr Arg Ser Met				
1	5	10	15	
Ala Arg Asp Leu Gln Glu Asn Pro Asn Arg Gln Pro Gly Glu Pro Arg				
	20	25	30	
Val Ser Glu Pro Tyr His Asn Ser Ile Val Glu Arg Ile Arg His Ile				
	35	40	45	

Phe	Arg	Thr	Ala	Val	Ser	Ser	Asn	Arg	Cys	Arg	Thr	Glu	Tyr	Gln	Asn	
50					55					60						
Ile	Asp	Leu	Asp	Cys	Ala	Tyr	Ile	Thr	Asp	Arg	Ile	Ile	Ala	Ile	Gly	
65				70					75						80	
Tyr	Pro	Ala	Thr	Gly	Ile	Glu	Ala	Asn	Phe	Arg	Asn	Ser	Lys	Val	Gln	
				85					90					95		
Thr	Gln	Gln	Phe	Leu	Thr	Arg	Arg	His	Gly	Lys	Gly	Asn	Val	Lys	Val	
			100					105					110			
Phe	Asn	Leu	Arg	Gly	Gly	Tyr	Tyr	Tyr	Asp	Ala	Asp	Asn	Phe	Asp	Gly	
	115					120						125				
Asn	Val	Ile	Cys	Phe	Asp	Met	Thr	Asp	His	His	Pro	Pro	Ser	Leu	Glu	
130					135						140					
Leu	Met	Ala	Pro	Phe	Cys	Arg	Glu	Ala	Lys	Glu	Trp	Leu	Glu	Ala	Asp	
145				150					155						160	
Asp	Lys	His	Val	Ile	Ala	Val	His	Cys	Lys	Ala	Gly	Lys	Gly	Arg	Thr	
			165					170						175		
Gly	Val	Met	Ile	Cys	Ala	Leu	Leu	Ile	Tyr	Ile	Asn	Phe	Tyr	Pro	Ser	
	180						185						190			
Pro	Arg	Gln	Ile	Leu	Asp	Tyr	Tyr	Ser	Ile	Ile	Arg	Thr	Lys	Asn	Asn	
	195					200						205				
Lys	Gly	Val	Thr	Ile	Pro	Ser	Gln	Arg	Arg	Tyr	Ile	Tyr	Tyr	Tyr	His	
210				215							220					
Lys	Leu	Arg	Glu	Arg	Glu	Leu	Asn	Tyr	Leu	Pro	Leu	Arg	Met	Gln	Leu	
225				230					235						240	
Ile	Gly	Val	Tyr	Val	Glu	Arg	Pro	Pro	Lys	Thr	Trp	Gly	Gly	Gly	Ser	
		245					250							255		
Lys	Ile	Lys	Val	Glu	Val	Gly	Asn	Gly	Ser	Thr	Ile	Leu	Phe	Lys	Pro	
	260						265						270			
Asp	Pro	Leu	Ile	Ile	Ser	Lys	Ser	Asn	His	Gln	Arg	Glu	Arg	Ala	Thr	
	275					280						285				
Trp	Leu	Asn	Asn	Cys	Asp	Thr	Pro	Asn	Glu	Phe	Asp	Thr	Gly	Glu	Gln	
290					295						300					
Lys	Tyr	His	Gly	Phe	Val	Ser	Lys	Arg	Ala	Tyr	Cys	Phe	Met	Val	Pro	
305				310					315						320	
Glu	Asp	Ala	Pro	Val	Phe	Val	Glu	Gly	Asp	Val	Arg	Ile	Asp	Ile	Arg	
		325						330						335		
Glu	Ile	Gly	Phe	Leu	Lys	Lys	Phe	Ser	Asp	Gly	Lys	Ile	Gly	His	Val	
	340						345						350			
Trp	Phe	Asn	Thr	Met	Phe	Ala	Cys	Asp	Gly	Gly	Leu	Asn	Gly	Gly	His	
	355					360						365				
Phe	Glu	Tyr	Val	Asp	Lys	Thr	Gln	Pro	Tyr	Ile	Gly	Asp	Asp	Thr	Ser	
	370				375						380					
Ile	Gly	Arg	Lys	Asn	Gly	Met	Arg	Arg	Asn	Glu	Thr	Pro	Met	Arg	Lys	
385				390					395						400	
Ile	Asp	Pro	Glu	Thr	Gly	Asn	Glu	Phe	Glu	Ser	Pro	Trp	Gln	Ile	Val	
			405				410							415		
Asn	Pro	Pro	Gly	Leu	Glu	Lys	His	Ile	Thr	Glu	Glu	Gln	Ala	Met	Glu	
	420						425						430			
Asn	Tyr	Thr	Asn	Tyr	Gly	Met	Ile	Pro	Arg	Tyr	Thr	Ile	Ser	Lys		
	435					440						445				
Ile	Leu	His	Glu	Lys	His	Glu	Lys	Gly	Ile	Val	Lys	Asp	Asp	Tyr	Asn	
	450				455						460					
Asp	Arg	Lys	Leu	Pro	Met	Gly	Asp	Lys	Ser	Tyr	Thr	Glu	Ser	Gly	Lys	
465				470					475						480	
Ser	Gly	Asp	Ile	Arg	Gly	Val	Gly	Gly	Pro	Phe	Glu	Ile	Pro	Tyr	Lys	
			485					490						495		
Ala	Glu	Glu	His	Val	Leu	Thr	Phe	Pro	Val	Tyr	Glu	Met	Asp	Arg	Ala	
			500				505						510			
Leu	Lys	Ser	Lys	Asp	Leu	Asn	Asn	Gly	Met	Lys	Leu	His	Val	Val	Leu	

<210> 311
 <211> 3304
 <212> DNA
 <213> *Caenorhabditis elegans*

<400> 311
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 tgtgtctgaa ccgtatcaca attcaatcgt cgagcggatt cgccatattt ttcggacggc 180
 tgtatcttcc aatcgttggt gcaccgagta ccaaaatatt gacctagatt gtgcatatat 240
 cacagaccga atcatagcta tcggttatcc agcaacagga atcgaagcga atttccgtaa 300
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 cttcgatatg actgatcatc atccgccgag tctcgaatta atggctccgt tttgcagaga 480
 ggctaaggaa tggcttgaag cagacgataa acatgtaata gctgtacact gtaaagctgg 540
 aaaaggccgt accggagtga tgatatgtgc tcttctcatc tacatcaact tctatccgag 600
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 gtatcatcca ctttctgtat agtgttttgt tttttaacaa actattgttc gattattttg 3060
 tatattcata ttatagctct caacttcccg attttccacg tatatatgta tattttgccc 3120
 ggtgaaaaat agcaattccc tatgaatgta tccccttcca tctgttttct tactcagaaa 3180

ttgtaattca cattgcgggt catcactaat cctatgggct ttaacacaat tctcccataa	3240
attaattgta cttaccaatt ttttgtttta ttatttagat ttgtaacatt gaaattgggtg	3300
ataa	3304

<210> 312

<211> 1642

<212> DNA

<213> *Caenorhabditis elegans*

<400> 312

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taatagtgtc tccatgtcca gtgacaatcg catggaggat tttaaacgtc gttttcgtcg	180
aagtggatcg ttaggaattc catttgtccc agaagaagat gttaaacaac tcttcacacc	240
aactcgtact gttcgtcgag aagcatctat tcgcgaaggg gatgaggaag aaggagtaca	300
aattctcaca ataattgtca agtcaagtcg tgtttcggag gatatctcaa aaatgattgc	360
aaacctccct gatcacactc gtatcaaaca tttggagact cgtgacagtc aagatggaag	420
ttccaaaact atggatgttc ttctagagat tgagctcttt cattatggaa aacaagaagc	480
aatggatctt atgagactta atgggcttga tgttcatgag gtgtcatcga ctattcgtcc	540
aactgcaata aaagagcaat atacagagcc tggatctgat gatgcgacaa ccggttctga	600
atggtttcca aaaagtattt atgatttgga tatttgtgca aaaagagtga ttatgtatgg	660
agcagggtcg gacgtgatc atcctggttt caaagatacc gagtatcgtc aacgtcgaat	720
gatgtttgct gaactggcgc tcaattacaa acacggtagag ccaattccgc gaaccgaata	780
tacatcatcc gaacggaaaa cttggggaat tatatataga aaattgagag aattgcacaa	840
aaagcacgca tgcaagcagt ttcttgataa ctttgagcta ctggagagac attgtggata	900
ctcgaaaaat aatattccgc aactagaaga tatctgcaag tttttgaaag caaaaactgg	960
attccgtgtt cgcccagtcg ccggatactt atcagctcgt gatttcttgg caggtcttgc	1020
atctcgtgtc ttcttctgca ctcaatacgt tcgccatcat gccgatccat tttacactcc	1080
agaaccagac accgttcacg agctcatggg tcacatggct ctattcgtcg atccagattt	1140
tgctcagttt tctcaagaga ttggattagc ttctcttggg gcacagagg aagatttgaa	1200
gaagcttgca acactctact tcttttccat tgaatttggg ctctcgtctg atgacgtgc	1260
cgattctcca gtaaaagaaa atggatcaaa tcatgaaaga tttaaagtat acggagcagg	1320
acttctgagc agtctggcg agttgcaaca tgccgttgag ggtagtgc aa cattattcg	1380
ttttgatccg gatcgtgttg ttgagcaaga atgtctcatt actactttcc agtcagcgta	1440
tttctatact agaaattttg aagaggccca gcagaaactc agaattgttca ccaacaacat	1500
gaaacgtccc ttcattgttc gttacaaccc atacacagaa agcgtcgaag ttctcaacaa	1560
ctcccgttcc attatgttgg cagtgaactc tctccgctca gacatcaacc tgctcgccgg	1620
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<210> 313

<211> 532

<212> PRT

<213> *Caenorhabditis elegans*

<400> 313

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20 25 30	
Ser Asp Asn Arg Met Glu Asp Phe Lys Arg Arg Phe Arg Arg Ser Gly	
35 40 45	
Ser Leu Gly Ile Pro Phe Val Pro Glu Glu Asp Val Lys Gln Leu Phe	
50 55 60	
Thr Pro Thr Arg Thr Val Arg Arg Glu Ala Ser Ile Arg Glu Gly Asp	
65 70 75 80	
Glu Glu Glu Gly Val Gln Ile Leu Thr Ile Ile Val Lys Ser Ser Arg	
85 90 95	
Val Ser Glu Asp Ile Ser Lys Met Ile Ala Asn Leu Pro Asp His Thr	
100 105 110	

Arg	Ile	Lys	His	Leu	Glu	Thr	Arg	Asp	Ser	Gln	Asp	Gly	Ser	Ser	Lys	
		115						120				125				
Thr	Met	Asp	Val	Leu	Leu	Glu	Ile	Glu	Leu	Phe	His	Tyr	Gly	Lys	Gln	
		130						135				140				
Glu	Ala	Met	Asp	Leu	Met	Arg	Leu	Asn	Gly	Leu	Asp	Val	His	Glu	Val	
145					150					155					160	
Ser	Ser	Thr	Ile	Arg	Pro	Thr	Ala	Ile	Lys	Glu	Gln	Tyr	Thr	Glu	Pro	
				165					170						175	
Gly	Ser	Asp	Asp	Ala	Thr	Thr	Gly	Ser	Glu	Trp	Phe	Pro	Lys	Ser	Ile	
			180					185					190			
Tyr	Asp	Leu	Asp	Ile	Cys	Ala	Lys	Arg	Val	Ile	Met	Tyr	Gly	Ala	Gly	
		195					200					205				
Leu	Asp	Ala	Asp	His	Pro	Gly	Phe	Lys	Asp	Thr	Glu	Tyr	Arg	Gln	Arg	
		210				215					220					
Arg	Met	Met	Phe	Ala	Glu	Leu	Ala	Leu	Asn	Tyr	Lys	His	Gly	Glu	Pro	
225					230					235					240	
Ile	Pro	Arg	Thr	Glu	Tyr	Thr	Ser	Ser	Glu	Arg	Lys	Thr	Trp	Gly	Ile	
				245					250					255		
Ile	Tyr	Arg	Lys	Leu	Arg	Glu	Leu	His	Lys	Lys	His	Ala	Cys	Lys	Gln	
			260					265					270			
Phe	Leu	Asp	Asn	Phe	Glu	Leu	Leu	Glu	Arg	His	Cys	Gly	Tyr	Ser	Glu	
		275					280					285				
Asn	Asn	Ile	Pro	Gln	Leu	Glu	Asp	Ile	Cys	Lys	Phe	Leu	Lys	Ala	Lys	
		290				295					300					
Thr	Gly	Phe	Arg	Val	Arg	Pro	Val	Ala	Gly	Tyr	Leu	Ser	Ala	Arg	Asp	
305					310					315					320	
Phe	Leu	Ala	Gly	Leu	Ala	Tyr	Arg	Val	Phe	Phe	Cys	Thr	Gln	Tyr	Val	
				325					330					335		
Arg	His	His	Ala	Asp	Pro	Phe	Tyr	Thr	Pro	Glu	Pro	Asp	Thr	Val	His	
			340					345					350			
Glu	Leu	Met	Gly	His	Met	Ala	Leu	Phe	Ala	Asp	Pro	Asp	Phe	Ala	Gln	
		355					360					365				
Phe	Ser	Gln	Glu	Ile	Gly	Leu	Ala	Ser	Leu	Gly	Ala	Ser	Glu	Glu	Asp	
		370				375					380					
Leu	Lys	Lys	Leu	Ala	Thr	Leu	Tyr	Phe	Phe	Ser	Ile	Glu	Phe	Gly	Leu	
385					390					395					400	
Ser	Ser	Asp	Asp	Ala	Ala	Asp	Ser	Pro	Val	Lys	Glu	Asn	Gly	Ser	Asn	
				405					410					415		
His	Glu	Arg	Phe	Lys	Val	Tyr	Gly	Ala	Gly	Leu	Leu	Ser	Ser	Ala	Gly	
			420					425					430			
Glu	Leu	Gln	His	Ala	Val	Glu	Gly	Ser	Ala	Thr	Ile	Ile	Arg	Phe	Asp	
		435					440					445				
Pro	Asp	Arg	Val	Val	Glu	Gln	Glu	Cys	Leu	Ile	Thr	Thr	Phe	Gln	Ser	
		450				455					460					
Ala	Tyr	Phe	Tyr	Thr	Arg	Asn	Phe	Glu	Glu	Ala	Gln	Gln	Lys	Leu	Arg	
465					470					475					480	
Met	Phe	Thr	Asn	Asn	Met	Lys	Arg	Pro	Phe	Ile	Val	Arg	Tyr	Asn	Pro	
				485					490					495		
Tyr	Thr	Glu	Ser	Val	Glu	Val	Leu	Asn	Asn	Ser	Arg	Ser	Ile	Met	Leu	
			500					505					510			
Ala	Val	Asn	Ser	Leu	Arg	Ser	Asp	Ile	Asn	Leu	Leu	Ala	Gly	Ala	Leu	
		515					520					525				
His	Tyr	Ile	Leu													
			530													

<210> 314
 <211> 817
 <212> DNA

<213> *Caenorhabditis elegans*

<400> 314

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agtgtcaaaa	actggattcc	gtgttcgccc	agtcgcccga	tacttatcag	ctcgtgattt	180
cttggcaggt	cttgcataatc	gtgtcttctt	ctgcactcaa	tacgttcgcc	atcatgccga	240
tccattttac	actccagaac	cagacaccgt	tcacgagctc	atgggtcaca	tggctctatt	300
cgctgatcca	gattttgctc	agttttctca	agagattgga	ttagcttctc	ttggagcatc	360
agaggaagat	ttgaagaagc	ttgcaacact	ctacttcttt	tccattgaat	ttgggtctctc	420
gtctgatgac	gctgccgatt	ctccagtaaa	agaaaatgga	tcaaatacatg	aaagatttaa	480
agtatacggg	gcaggacttc	tgagcagtg	tgccgagttg	caacatgccg	ttgagggtag	540
tgcaaccatt	attcgttttg	atccggatcg	tggtgttgag	caagaatgtc	tcattactac	600
tttccagtca	gcgtatttct	atactagaaa	ttttgaagag	gcccagcaga	aactcagaat	660
gttcaaccaac	aacatgaaac	gtcccttcat	tgttcgttac	aaccataca	cagaaagcgt	720
cgaagtcttc	aacaactccc	gttccattat	gttggcagtg	aactctctcc	gtcagacat	780
caacctgctc	gccggagctc	tccactacat	cctgtag			817

<210> 315

<211> 45

<212> PRT

<213> *Caenorhabditis elegans*

<400> 315

Met	Asp	Ser	Leu	Phe	Gln	Met	Ala	Ser	Ala	Met	Lys	Phe	Gln	Tyr	Tyr
1				5					10					15	
Ser	Lys	Lys	Ala	Ala	Gly	Lys	Thr	Met	Ser	Asn	Ser	Val	Lys	Asn	Trp
			20					25					30		
Ile	Pro	Cys	Ser	Pro	Ser	Arg	Arg	Ile	Leu	Ile	Ser	Ser			
		35					40					45			

<210> 316

<211> 466

<212> DNA

<213> *Caenorhabditis elegans*

<400> 316

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gggtctggac	tgcgacgaga	ctcaagcgag	tcccgtctgt	gccgatatcc	cctcacagtg	120
gactttgagg	ctttcggctg	ggactggatc	atcgaccta	agcgctacaa	ggccaactac	180
tgctccggcc	agtgggagta	catgttcatg	caaaaatata	cgcataccga	tttggtgcag	240
caggccaatc	caagaggtta	tgctgggccc	tggtgtaccc	ccaccaagat	gtccccaatc	300
aacatgctct	acttcaatga	caagcagcag	attatctacg	gcaagatccc	tggcatgggtg	360
gtggatcgct	gtggctgctc	ttaaggtggg	ggatagagga	tgctcccccc	acagaccgta	420
ccccaaagacc	catagccctg	cccaatccac	cgctgatcc	aaacat		466

<210> 317

<211> 128

<212> PRT

<213> *Caenorhabditis elegans*

<400> 317

Ile	Arg	His	Glu	His	Gly	Ala	Ser	Ser	Pro	Arg	Glu	His	Lys	Thr	Phe
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Pro	Ala	Glu	Pro	Gly	Ser	Gly	Leu	Arg	Arg	Asp	Ser	Ser	Glu	Ser	Arg
			20					25					30		
Cys	Cys	Arg	Tyr	Pro	Leu	Thr	Val	Asp	Phe	Glu	Ala	Phe	Gly	Trp	Asp
		35					40					45			

Trp	Ile	Ile	Ala	Pro	Lys	Arg	Tyr	Lys	Ala	Asn	Tyr	Cys	Ser	Gly	Gln
50						55				60					
Trp	Glu	Tyr	Met	Phe	Met	Gln	Lys	Tyr	Pro	His	Thr	His	Leu	Val	Gln
65					70					75					80
Gln	Ala	Asn	Pro	Arg	Gly	Tyr	Ala	Gly	Pro	Cys	Cys	Thr	Pro	Thr	Lys
				85				90						95	
Met	Ser	Pro	Ile	Asn	Met	Leu	Tyr	Phe	Asn	Asp	Lys	Gln	Gln	Ile	Ile
			100					105					110		
Tyr	Gly	Lys	Ile	Pro	Leu	Ala	Met	Val	Val	Asp	Arg	Cys	Gly	Cys	Ser
		115					120					125			

<210> 318
 <211> 9
 <212> DNA
 <213> Homo sapiens

<400> 318
 caaaactaa 9

<210> 319
 <211> 20
 <212> DNA
 <213> Caenorhabditis elegans

<400> 319
 ccactatggc cgagatttcc 20

<210> 320
 <211> 44
 <212> DNA
 <213> Caenorhabditis elegans

<400> 320
 ccagtgaaaa gttcttctcc tttcttcttc ttctcgaatt cgga 44

<210> 321
 <211> 21
 <212> DNA
 <213> Caenorhabditis elegans

<400> 321
 cttcctcttc tcgaattcgg c 21

<210> 322
 <211> 8
 <212> PRT
 <213> Caenorhabditis elegans

<400> 322
 Gly Arg Lys Gly Phe Pro His Val
 1 5

<210> 323
 <211> 7
 <212> PRT
 <213> Caenorhabditis elegans

<220>
 <221> VARIANT
 <222> (1)...(7)
 <223> Xaa = Any Amino Acid

<400> 323
 Arg Xaa Xaa Ile Xaa Xaa Gly
 1 5

<210> 324
 <211> 7
 <212> PRT
 <213> Caenorhabditis elegans or Homo sapiens

<400> 324
 Cys Gly Cys Cys Cys Cys Cys
 1 5

<210> 325
 <211> 79
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 325
 Val Leu Asp Asp Tyr Gly Arg Val Asp Trp Trp Gly Gly Val Val Met
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 Tyr Glu Met Met Cys Gly Arg Leu Pro Phe Tyr Asp His Lys Leu Phe
 20 25 30
 Glu Leu Ile Arg Phe Pro Leu Glu Ala Leu Leu Gly Leu Leu Lys Asp
 35 40 45
 Pro Thr Gln Arg Leu Gly Gly Gly Glu Asp Ala Glu Ile Phe Phe Trp
 50 55 60
 Tyr Lys Pro Pro Lys Pro Val Ser Glu Thr Asp Thr Tyr Phe Asp
 65 70 75

<210> 326
 <211> 48
 <212> PRT
 <213> Homo sapiens or Caenorhabditis elegans

<400> 326
 Thr Met Phe Leu Lys Leu Gly Lys Gly Thr Phe Gly Lys Val Ile Leu
 1 5 10 15
 Lys Glu Lys Thr Tyr Ala Lys Ile Leu Lys Lys Val Ile Ala Glu Val
 20 25 30
 Ala His Thr Leu Thr Glu Asn Arg Val Leu Gln His Pro Phe Leu Thr
 35 40 45

<210> 327
 <211> 27
 <212> DNA
 <213> Caenorhabditis elegans

<400> 327
 caagcgttga ctcaaataaa tccaaaa

<210> 328

<211> 55

<212> DNA

<213> *Caenorhabditis elegans*

<400> 328

caagcgttga ctcaatgcgt tgactcaatg cgttgactcg ttgacgaatc caaaa

55